INTERNATIONAL MARITIME ORGANIZATION

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SUB-COMMITTEE ON BULK LIQUIDS AND GASES
10th session
Agenda item 19

BLG 10/19
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REPORT TO THE MARITIME SAFETY COMMITTEE AND THE MARINE ENVIRONMENT PROTECTION COMMITTEE

Table of contents

LIST OF ANNEXES

1 GENERAL

1.1 The Sub-Committee on Bulk Liquids and Gases held its tenth session from 3 to 7 April 2006 under the chairmanship of Mr. Z. Alam (Singapore). The Vice-Chairman, Mr. S. Oftedal (Norway), was also present.

1.2 The session was attended by delegations from the following Member Governments:

ALGERIA
ANGOLA
ARGENTINA
AUSTRALIA
BAHAMAS
BELGIUM
BOLIVIA
BRAZIL
CANADA
CHILE
CHINA
COLOMBIA
CYPRUS
DENMARK
DOMINICAN REPUBLIC
ECUADOR
EGYPT
ESTONIA
FINLAND
FRANCE
GERMANY
GREECE
INDONESIA
IRAN (ISLAMIC REPUBLIC OF)
IRAQ
IRELAND
ISRAEL
ITALY
JAPAN
KENYA
LIBERIA
MALAYSIA
MALTA
MARSHALL ISLANDS
MEXICO
MOROCCO
NETHERLANDS
NEW ZEALAND
NIGERIA
NORWAY
PANAMA
PERU
PHILIPPINES
POLAND
PORTUGAL
REPUBLIC OF KOREA
ROMANIA
RUSSIAN FEDERATION
SAUDI ARABIA
SINGAPORE
SLOVENIA
SOUTH AFRICA
SPAIN
SWEDEN
TURKEY
TUVALU
UNITED KINGDOM
UNITED STATES
URUGUAY
VANUATU
VENEZUELA

by the following Associate Member:

HONG KONG, CHINA

by an observer from the following intergovernmental organization:

EUROPEAN COMMISSION (EC)

and by observers from the following non-governmental organizations:

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL UNION OF MARINE INSURANCE (IUMI)
INTERNATIONAL CONFEDERATION OF FREE TRADE UNIONS (ICFTU)
INTERNATIONAL RADIO COMMITTEE (CIRM)
INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH)
BIMCO
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
ICHCA INTERNATIONAL (ICHCA)
EUROPEAN CHEMICAL INDUSTRY COUNCIL (CEFIC)
OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)
FRIENDS OF THE EARTH INTERNATIONAL (FOEI)
INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATION (IFSMA)
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS (INTERTANKO)
WORLD CONSERVATION UNION (IUCN)
SOCIETY OF INTERNATIONAL GAS TANKER AND TERMINAL OPERATORS LIMITED (SIGTTO)
DANGEROUS GOODS ADVISORY COUNCIL (DGAC)
INTERNATIONAL COUNCIL OF CRUISE LINES (ICCL)
THE EUROPEAN ASSOCIATION OF INTERNAL COMBUSTION ENGINE MANUFACTURERS (EUROMOT)
INTERNATIONAL PETROLEUM INDUSTRY ENVIRONMENTAL CONSERVATION ASSOCIATION (IPIECA)
INTERNATIONAL PARCEL TANKERS ASSOCIATION (IPTA)
INTERNATIONAL BUNKER INDUSTRY ASSOCIATION (IBIA).

Opening address

1.3 In welcoming the participants, the Secretary-General referred to the accident of a pleasure craft in Bahrain the week before the meeting which caused heavy loss of life and came soon after the recent casualties in the Red Sea and off the coast of Cameroon. He stated that until the cause of the disaster was officially established it would be premature to draw any conclusions, however, if overloading had, as reported, played a significant role in the capsizing of the ship, it was regrettable that in the 21st century a ship was allowed to sail with passengers on board exceeding in number those allowed for safe passage. He expressed the view that one human life lost at sea is one life lost and one too many and informed the Sub-Committee that he had offered IMO's assistance to the authority in Bahrain in whatever way it might be needed.

Referring to the major issues in global shipping he stated that they were in many ways the same as those that global society as a whole was currently facing and, like any other industry, shipping's environmental credentials were under sharper scrutiny than ever before as society came to terms with the understanding that this planet and its resources were not limitless. Shipping had to ensure that its activities were environmentally friendly and sustainable, including ship design, construction and equipment, ship operation and the final disposal of ships once their economic lives were over and this meant that whatever negative impact shipping may have on the environment, it must be reduced to the point where it is clearly outweighed by the positive benefits that the activity brings.

The Secretary-General drew attention to the Council's decision that the theme for this year's World Maritime Day should be "Technical Co-operation: IMO's response to the 2005 World

Summit", with special emphasis on the maritime needs of Africa. He pointed out that the theme had given the Organization the opportunity to contribute to the fulfilment of the Millennium Development Goals adopted by the 2000 Millennium Summit and re-affirmed by the 2005 World Summit, as the world community's response to identified new needs and challenges presented by the fact that hundreds of millions of people are left defenceless against hunger, disease and environmental degradation, even though the means to protect them against these were available. He emphasized that maritime activity had a key role to play in meeting these goals and already provided the mechanism to promote economic development, being an important source of invisible income to many developing countries. He hoped that the Organization could count on the support and contribution of all the components of shipping to achieving the noble goals the world community had set for the current Millennium.

Referring to the most important issues, he singled out a number of items the Sub-Committee would be dealing with at this session. In particular, with regard to the evaluation of safety and pollution hazards of chemicals and the subsequent assignment of pollution categories and carriage requirements under MARPOL Annex II and the IBC Code, the Secretary-General reiterated that this remained paramount to the work of the Sub-Committee in view of the entry into force, on 1 January 2007, of the revised MARPOL Annex II and the consequential amendments to the IBC Code.

Concerning the issue of invasive species in ships' ballast water, the Secretary-General referred to the benefits to be derived from a standardized and globally agreed approach to the issue and the need to work together to ensure an early entry into force of the BWM Convention and an effective implementation of its provisions. In announcing the status of the Convention, he asked participants to pass the message to their Administration so that the requisite number of countries and percentage of the world tonnage of merchant shipping could be achieved at the earliest opportunity. He expressed his hope that the development of guidelines for uniform implementation of the BWM Convention would make good progress at this session.

In referring to the 1997 Air Pollution Conference which had invited the MEPC to review the NOx emission limits at a minimum of five-year intervals after the entry into force of MARPOL Annex VI, he observed that new scientific evidence had very clearly highlighted the damage to human health and the environment from air pollution. Scientists and marine engine manufacturers had acknowledged that the different technologies available at present would allow significant improvements to be made to the standards included in that Annex. He stressed the importance of ensuring that the relevant expertise was made available from Member States, the many sectors of the industry and NGOs, so that this very important task could be accomplished within the limited timeframe set.

With respect to the proposed amendments to MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea, the Secretary-General noted that Member States and interested industry sectors had provided comments which were an indication of the high significance and interest the proposals had generated. He then referred to other tasks the Sub-Committee would deal with at this session and which, in his opinion, were all equally important.

The Secretary-General invited the Sub-Committee's attention to issues of a general nature and indicated that, as the Audit Scheme was now ready for implementation, he would appreciate receiving favourable responses from Members with respect to, firstly, that they would offer themselves for audit, as requested in resolution A.974(24); secondly, that they would nominate auditors to enable him to select audit teams to conduct the audit of volunteering Members; and,

thirdly, that they would nominate qualified auditors to participate in the further regional training courses the Organization was planning. Pledging his personal commitment to the Scheme, he asked for support and co-operation in its wide and effective implementation.

Concerning the planned refurbishment of the Headquarters Building which would be closed for approximately 12 months between the summers of 2006 and 2007, he informed that the Secretariat would move temporarily to offices provided by the Host Government in London and that the meetings of the Council, Committees and Sub-Committees would be held elsewhere in London and abroad. He expressed hope that Members would be prepared to face, with resolute spirit and good humour, any discomfort and disruption from normal operations emanating from the refurbishment decision.

Chairman's remarks

1.4 The Chairman, in thanking the Secretary-General, stated that his words and advice would be given every consideration in the deliberations of the Sub-Committee and its working groups.

Adoption of the agenda

1.5 The Sub-Committee adopted the agenda (BLG 10/1) and agreed, in general, to be guided in its work by the annotations contained in document BLG 10/1/1, also taking into account document BLG 10/1/2 concerning the arrangements for the session. The agenda, as adopted, together with the list of documents considered under each agenda item, is set out in document BLG 10/INF.5.

2 DECISIONS OF OTHER IMO BODIES

General

2.1 The Sub-Committee noted the decisions taken by MSC 80, MEPC 53, MEPC 54, SLF 48, DSC 10, FP 50 and DE 49 (BLG 10/2, BLG 10/2/1, BLG 10/2/2 and BLG 10/2/3) relevant to the work of the Sub-Committee and took them into account in its deliberations when dealing with relevant agenda items.

Agenda items transferred from other sub-committees

2.2 The Sub-Committee noted that, in view of the need to reduce the workload of the DE Sub-Committee, MSC 80 had agreed to move, on an *ad hoc* basis for 2006 only, the following items from the provisional agenda for DE 49 to that for BLG 10:

.1 safety aspects of ballast water management; and

.2 guidelines on equivalent methods to reduce on-board NOx emission.

Application of the Committees' Guidelines

2.3 The Sub-Committee noted that MSC 80 had agreed that working groups could start work on Monday mornings on the basis of the draft terms of reference presented by the Chairman of the Committee or sub-committee concerned, pending formal discussion of those terms of reference under the relevant agenda item. However, these measures should be decided by the

Chairman of the Committee or sub-committee concerned on a case-by-case basis. MSC 80 had also agreed that sub-committee working groups, if circumstances and time constraints so dictate, may submit their reports directly to the Committees, if permitted by the parent sub-committee, following consultation among the Chairman of the group, the Chairman of the parent sub-committee and the Chairmen of the Committees concerned.

2.4 The Sub-Committee also noted that MSC 80 had agreed that experts could participate in the Committee and sub-committee sessions on condition that they provided written advice or expertise only through the Secretariat, participated only in sessions, or parts thereof, to which they had been specifically invited and did so without taking part in debates and without a vote.

2.5 The Sub-Committee further noted that MSC 80 had reminded its subsidiary bodies of the provisions of paragraph 3.8 of the Guidelines, stating that they "should not develop amendments to, or interpretations of, any relevant IMO instrument without authorization from the Committee(s)".

Name of the Sub-Committee

2.6 The Sub-Committee noted that MSC 80 had considered that the point made at BLG 9 that the name of the Sub-Committee should be modified to better reflect the work being undertaken, taking into account that the Sub-Committee is also dealing with issues that are clearly not related to the transport of bulk liquids and gases (i.e. matters related to sewage), should be examined by the MEPC. MEPC 53 considered the above proposal to change the name of the BLG Sub-Committee and decided that the name should not be changed at this stage.

3 EVALUATION OF SAFETY AND POLLUTION HAZARDS OF CHEMICALS AND PREPARATIONS OF CONSEQUENTIAL AMENDMENTS

3.1 The Sub-Committee recalled that this part of the agenda traditionally contains routine classification tasks which are normally put directly to the ESPH Working Group prior to further consideration by the Sub-Committee. Notwithstanding this observation, it was recognized that the Sub-Committee always considers the report of the intersessional meeting of the ESPH Working Group and any documents containing matters of principle for which discussions in plenary are necessary.

3.2 The Sub-Committee thanked the ESPH Working Group and its Chairman, Mrs. M.C. Tiemens-Idzinga (Netherlands), for the considerable amount of work that had been carried out at its last intersessional meeting (ESPH 11).

Action taken by the Sub-Committee

3.3 In considering the report of the eleventh intersessional meeting of the ESPH Working Group (BLG 10/3), the Sub-Committee approved the report in general and took action as indicated hereunder:

.1 agreed that until 31 December 2006 any provisional assessment of products should be reported to the Organization under the old and new systems of classification using the new BLG Product Data Reporting Form;

.2 noted the rationale developed for estimating acute inhalation toxicity ratings by the GESAMP/EHS Working Group, which provides a means of generating acute

inhalation evaluation which would otherwise be difficult to obtain and allowed completion of the "C3" column in the GESAMP/EHS Composite List of Hazard Profiles;

In this regard, the delegation of the United States noted that the rationale used resulted in soyabean oil and castor oil being identified as having safety hazards. While acknowledging that some solidifying vegetable oils have operational hazards associated with tank cleaning, the United States felt that it could not support the determination that these vegetable oils have safety hazards and it therefore requested that the ESPH Working Group explain fully and justify the safety hazard assignment contained in the report from its eleventh session (ESPH 11).

The Sub-Committee, following the explanation by the Chairman of the ESPH Working Group, recalled the views expressed by the group that, as a result of using such a method, some products were assigned an "S" in column "d" of chapter 17 of the amended IBC Code, which, although this did not affect the carriage requirements, was important as this information indicated that the product could present a safety risk from an operational point of view. In view of the extensive deliberation at ESPH 11 on the matter, the Sub-Committee agreed that this aspect did not require further consideration by the group;

.3 noted the discussions associated with the evaluation of new products and the resultant classification and carriage requirements which have been reflected in MEPC.2/Circ.11;

.4 agreed that information on a vegetable oil submitted for evaluation should be qualified by the maximum free fatty acid (FFA) content and not by a representative FFA content for the particular oil and, consequently, would not need to be qualified by an FFA limit when the product appears in either List 1 of the MEPC.2 circular or a future amended chapter 17 of the IBC Code. In this regard, the Sub-Committee reiterated that the onus for submitting the correct FFA content for vegetable oils rested with the industry submitting these data to their administration.

In this context, the Sub-Committee considered document BLG 10/3/3 submitted by Japan and the United Kingdom, concerning the list of vegetable oils in chapter 17 of the amended IBC Code which, following the re-assessment carried out by the GESAMP/EHS Working Group and decisions taken at ESPH 11, constitute amendments to the Code and, therefore, should feature in List 1 of the MEPC.2 circular, due to be published in December of this year. Furthermore, as these entries will appear in both chapter 17 of the amended IBC Code and the MEPC.2 circular, it was proposed that a footnote be added in both the published version of the Code and in the MEPC.2 circular to indicate that existing entries in the amended IBC Code have been superseded by the relevant entries in the MEPC.2 circular.

The Sub-Committee also expressed the need to have industry confirm whether the FFA content of those vegetable oils which only appear in the amended IBC Code reflect the maximum FFA content under which these products are carried.

Whilst recalling that, at BLG 9, the Sub-Committee had agreed to have a separate annex in the MEPC.2 circular containing vegetable oil synonyms, it tasked the ESPH Working Group to review the information with a view to finalizing the consolidated list of vegetable oils;

.5 agreed that for the sake of transparency and ease of identification by those handling such cargoes (vegetable oils), having individual entries in the list of synonyms in the MEPC.2 circular is more useful than having generic entries. In this context, the Sub-Committee tasked the ESPH Working Group to finalize the consolidated list of vegetable oils, set out in the annex to document BLG 10/3/2 (United Kingdom). These synonyms will be included in the next edition of the MEPC.2 circular, which is due for publication on 31 December 2006 and annually thereafter;

.6 noted the results of the work on the evaluation of cleaning additives and, in particular, that thirty-one cleaning additives had been evaluated, twenty–one of which were approved for inclusion in the list of cleaning additives meeting the requirements of paragraph 1.8.2 of the Procedures and Arrangements Standards;

.7 endorsed the proposal to issue an IMO circular to emphasize the use of the correct product name in a shipping document and, in view of the timeframe for the entry into force of the amended IBC Code (1 January 2007) and the meeting schedule for 2006, agreed that it be issued as a BLG circular**.** In this regard, the Sub-Committee tasked the ESPH Working Group to finalize the text of the circular;

.8 agreed, in light of the comments by IPTA (BLG 10/3/8), which also found support from a number of delegations, that the proposal to have a shipping document recommended by the Organization for the carriage of bulk chemicals would be useful. To this end, the Sub-Committee tasked the ESPH Working Group to prepare the draft of such a shipping document and the associated BLG circular, using the proposed format set out in the annex to document BLG 10/3/8 as a basis;

.9 noted that both reporting forms - the BLG product data reporting form and the GESAMP/EHS product data reporting form, as well as the GESAMP Reports and Studies No.64, have been placed on the IMO public domain website as one package to facilitate accessibility by the end-user;

.10 whilst noting that the re-evaluation of solidifying floating substances as persistent floaters by the GESAMP/EHS Working Group may affect the current classification of the specific products which appear in chapter 17 of the amended IBC Code, the Sub-Committee tasked the ESPH Working Group with the necessary follow-up;

.11 noted the work done on the re-evaluation of the products omitted from the amended IBC Code due to missing pollution and/or safety data as well as the classification and assignment of carriage requirements of these products. The Sub-Committee agreed that the classification and carriage requirements of these products should be published as a BLG circular in order to inform all Parties of the latest developments necessary to implement the revised MARPOL Annex II and the amended IBC Code;

.12 noted the development of a revised list of products with missing pollution and/or safety data which, because of lack of essential data, were not included in the amendments to the IBC Code. The Sub-Committee further noted that following the *ad hoc* sub-group meeting on aquatic toxicology of the GESAMP/EHS Working Group held from 15 to 18 November 2005, as well as its regular meeting which took place from 20 to 24 February 2006, a number of hazard profiles of products from this list had been completed, and that these profiles still need to be considered by the ESPH Working Group in order to assign carriage requirements under the amended IBC Code. In this regard, the Sub-Committee noted that the delegation of the Bahamas had withdrawn its document (BLG 10/3/7) on the implementation of the revision of the IBC Code requirements for coal tar pitch (molten);

.13 noted that, following the forty-second meeting of the GESAMP/EHS Working Group held from 20 to 24 February 2006, the GESAMP/EHS Composite List of Hazard Profiles had been published as an annex to the report of the meeting under the symbol BLG/Circ.16;

.14 approved the cover note that will accompany the different lists in the revised MEPC.2 circular, which will be valid for the edition of the circular to be published on 31 December 2006 and thereafter;

.15 agreed to task the ESPH Working Group to develop the cover note that will accompany the interim list of products (list 1b) that will be issued as a BLG circular;

.16 endorsed the proposal that, in order to facilitate the management of information, tripartite contact addresses should be placed on IMO's Global Integrated Shipping Information System (GISIS) so that updating can be carried out via the system, and requested the Secretariat to arrange for a presentation of GISIS at BLG 11;

.17 agreed to the proposed amendments to the Procedures for Port State Control, adopted by the Organization by resolution A.787(19) and amended by resolution A.882(21). Recognizing that the amended Procedures may require further work and updating by other IMO bodies such as the FSI and DSC Sub-Committees and that the entry into force date of the amendments should coincide with that of the revised MARPOL Annex II, the Sub-Committee referred the amendments to the FSI and DSC Sub-Committees for their consideration and for subsequent approval at MEPC 55 and MSC 82;

.18 agreed to introduce the revision of the 1973 Intervention Protocol, in particular the List of Substances referred to in paragraph 2(a) of article I of the Protocol, as an item on the future work programme as a consequence of the revised MARPOL Annex II;

.19 noted that the revision of the Guidelines for the provisional assessment of liquids transported in bulk is completed and, as instructed by BLG 9, had been reported directly to MEPC 54, which approved the Guidelines. The Sub-Committee reiterated the plea made by MEPC 54 to industry, in particular the chemical industry, to revise, based on section 5 of the revised Guidelines, List 2 of the MEPC.2 circular which contains pollutant-only-mixtures;

The Sub-Committee thanked the delegation of the Netherlands for its offer to IMO of the computer programme it had developed, which would be put on the IMO's public domain website to facilitate the mixture calculation under the revised Guidelines by interested stakeholders.

.20 reconsidered its previous decision to issue a loose-leaf publication of the amended IBC Code and agreed that the next edition of the Code be published as a perfect-bound book, with the contents of chapters 17, 18 and 19 additionally included in electronic format on a CD-ROM. The Sub-Committee further agreed to inform MSC and MEPC accordingly. It was also considered that, in the future, it would be useful if the MEPC.2 circular, which is published annually, could be made available as a downloadable file on the IMO public domain website;

.21 agreed to the proposed timescale for the next set of amendments to the IBC Code, as set out in annex 13 of document BLG 10/3, and to the draft amendments to chapters 17, 18 and 19, as set out in annex 7 in BLG 10/3. In view of the fact that more amendments to chapters 17, 18 and 19 have been agreed at this session, the Sub-Committee tasked the Secretariat to prepare a consolidated text of the draft amendments for approval in principle by MSC 81 and subsequently by MEPC 55. In this regard, the Sub-Committee also agreed that the proposed amendments on fire protection considered by BLG 9 should be included with the amendments to chapters 17, 18 and 19;

.22 whilst recalling that MEPC 53 had agreed that ESPH 12 could report directly to MEPC 55 and MSC 82 on items to be identified by BLG 10, tasked the ESPH Working Group to identify the relevant items for consideration by the Sub-Committee;

.23 noted the discussion on the transport of bio-fuels and gasoline-alcohol mixtures as cargoes; and

.24 approved the future work programme of the ESPH Working Group noting the additional tasks given to the group during approval of the group's report of its eleventh session.

Bio-fuels and gasoline-alcohol mixtures

3.4 The Sub-Committee noted that the transport of these products was becoming a major issue because it is unclear exactly which MARPOL requirements need to be followed. These bio-fuels are considered to fall under MARPOL Annex II when being moved as products intended for blending with petroleum or mineral products. However, when being carried as a blended product, it becomes unclear whether their carriage should be in accordance with MARPOL Annex I or Annex II. As a result, this can lead to confusion.

3.5 In this context, the Sub-Committee considered document BLG 10/3/9 (Sweden, the United Kingdom and IPTA), which sets out guidance that the United Kingdom and Sweden intend to issue to ships entitled to fly their flags, namely that:

.1 when declaring and shipping bio-fuels, bio-diesel, (Source Product) fatty acid methyl esters, B100 and ethanol, ethyl alcohol E100, the requirements of MARPOL Annex II and the IBC Code shall be complied with;

.2 when declaring and shipping bio-fuels blended with base petroleum fuels, the following products can be carried under MARPOL Annex I, provided the limits are not exceeded:

.1 blended bio-diesel with a maximum limit of 15% bio-diesel and 85% ordinary diesel, B15; or

.2 blended bio-ethanol with a maximum limit of 15% bio-ethanol and 85% ordinary gasoline/petrol, E15; or

.3 gasoline/alcohol mixtures with a maximum limit of 15% alcohol and 85% ordinary gasoline/petrol, E15;

.3 when carrying these products under MARPOL Annex I or Annex II, the shipper of the cargo is responsible for providing compatibility information to the ship operator and/or master. The cargo shall be compatible with all materials of construction such that no damage to the integrity of the materials of construction is incurred; and

.4 if the blended products contain a higher percentage of bio-fuels and gasoline-alcohol mixtures than shown at paragraphs 3.5.2.2 and 3.5.2.3 above, then the shipper should contact the Administration with regard to the carriage of these products.

3.6 One delegation, whilst supporting the proposal in principle, commented on the reference to ASTM D6751 as the definition of bio-diesel and suggested that other national standards may be considered as alternatives.

3.7 The Sub-Committee agreed that the proposed guidance would facilitate the shipment of these products in a safe and environmentally friendly manner and encouraged Member Governments to follow a similar approach.

3.8 The Sub-Committee, recognizing the importance of the issues raised on the transport of bio-fuels, agreed that the MEPC should consider adding this topic to its future work programme and therefore invited Member Governments and international organizations to submit proposals to MEPC 55, in accordance with the Committees' Guidelines, requesting that a relevant new item be added to the work programme of BLG 11.

Guidelines for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels (LHNS Guidelines, resolution A.673(16))

3.9 The Sub-Committee recalled that SLF 48 had agreed to the revised model form of the Certificate of Fitness under the Guidelines, which is set out in the annex to document BLG 10/3/1, and had referred it to the BLG Sub-Committee for final consideration.

3.10 The Sub-Committee also recalled that the United Kingdom in its submission (MEPC 54/10/4) had proposed that the list of products contained in Appendix 1 – Table of permitted cargoes in the LHNS Guidelines be updated to include all products that can be carried under these Guidelines, in addition to two further entries that would allow mixtures of oil-based muds and water-based muds to be carried.

3.11 In this regard, the Sub-Committee noted that MEPC 54 had instructed BLG 10 to consider, as a matter of urgency, the draft model form of the Certificate of Fitness contained in the draft amendments to the LHNS Guidelines as well as the proposal by the United Kingdom in view of the entry into force of the revised MARPOL Annex II and the amended IBC Code on 1 January 2007.

3.12 After a short discussion, the Sub-Committee tasked the ESPH Working Group to review those aspects of the Guidelines within its remit and report back to plenary later in the week.

Proposals for inclusion of distilled resin oil, oxygenated aliphatic hydrocarbon mixture and alkylbenzene mixtures containing at least 50% toluene in the IBC Code

3.13 The Sub-Committee noted the proposals by the Netherlands for the inclusion of three new products in the amended IBC Code: distilled resin oil (BLG 10/3/4 and BLG 10/INF.4) oxygenated aliphatic hydrocarbon mixture (BLG 10/3/5 and BLG 10/INF.2) and alkylbenzene mixtures containing at least 50% toluene (BLG 10/3/6 and BLG 10/INF.3).

3.14 The Sub-Committee tasked the ESPH Working Group to carry out the evaluations since it was recognized that the evaluation of new products is a routine task of the group which is normally put directly to the group prior to further consideration by the Sub-Committee.

Establishment of the working group

3.15 Recognizing the necessity to make progress on the above issues, the Sub-Committee established the Working Group on Evaluation of Safety and Pollution Hazards of Chemicals and instructed it, taking into account the comments and decisions made in plenary, to:

.1 conduct an evaluation of new products;

.2 conduct an evaluation of cleaning additives;

.3 review the MEPC.2 circular − Provisional classification of liquid substance transported in bulk;

.4 prepare the interim list of products (list 1b) of the MEPC.2 circular, containing:

.4.1 products omitted from the amended IBC Code due to missing data which now have their GESAMP/EHS hazard profile complete and which have been classified;

.4.2 new products which have been classified since the adoption of the amended IBC Code;

.4.3 products which appear in the amended IBC Code but have since been amended;

.5 review, with a view to finalizing, the consolidated list of vegetable oils in relation to the issue of double entries in the amended IBC Code and the MEPC.2 circular;

.6 finalize the consolidated list of synonyms of vegetable oils;

.7 prepare a BLG circular for the use of the correct product name in the shipping document for bulk liquid cargoes;

.8 prepare a recommendatory shipping document and the associated BLG circular;

.9 prepare the cover note that will accompany the interim list of products (list 1b) to be used before 31 December 2006;

.10 prepare amendments to the List of Substances referred to in paragraph 2(a) of article 1 of the 1973 Intervention Protocol as a consequence of the revision of MARPOL Annex II;

.11 consider the administrative procedures concerning submission of data to GESAMP/EHS and ESPH working groups;

.12 amend the reporting form on cleaning additives (MEPC/Circ.363) as a consequence of the revised MARPOL Annex II;

.13 review the LHNS Guidelines from the perspective of Appendix 1 – Table of permitted cargoes and Appendix 2 – Model form of Certificate of Fitness;

.14 identify those items that need to be reported directly to MEPC 55; and

.15 prepare the work programme and agenda for ESPH 12.

Report of the working group

3.16 Having considered the report of the working group (BLG 10/WP.1), the Sub-Committee approved the report in general and, in particular:

.1 agreed to the classification and carriage requirements of the three new substances submitted, set out at annex 1;

.2 agreed to the approach taken for the list of products to be added to chapters 17 and 18 of the amended IBC Code as well as those currently contained in the amended IBC Code for which the carriage requirements or product name have been revised.

In this regard, the delegation of the United States reserved its position on those cargoes that appear in the amended IBC Code but have since been amended as a result of further evaluation by the GESAMP/EHS Working Group;

.3 agreed to defer the classification and carriage requirements of coal tar pitch (molten) and creosote (coal tar) until ESPH 12 based on additional information from GESAMP/EHS 43;

.4 agreed to revise MSC/Circ.1095 in order to reflect the concerns regarding benzene in pyrolysis gasoline and bring this to the attention of the MSC;

.5 agreed that no tripartite agreement should be established until confirmation has been received that the data required have been submitted to the GESAMP/EHS Working Group for products currently omitted from the amended IBC Code but as yet not re-evaluated as a result of missing safety and/or pollution data;

.6 agreed to the entry of rapeseed oil in chapter 17 of the amended IBC Code and the addition of rapeseed oil (high erucic acid) and rapeseed oil (low erucic acid) to the synonym list for vegetable oils after deletion of rapeseed oil (low erucic acid) from chapter 17 of the amended IBC Code;

.7 approved, for issuance, BLG/Circ.17 on Use of the correct product name in the shipping document for bulk liquid cargoes, subject to the endorsement of the MSC and the MEPC;

.8 approved, for issuance, BLG/Circ.18 on Example of an optional shipping document for the purposes of MARPOL Annex II and the IBC Code, subject to the endorsement of the MSC and the MEPC and agreed to request the Secretariat to bring this circular to the attention of the FAL Committee, recognizing that in future the format may need to be revised based on experience gained;

.9 approved, for issuance, BLG/Circ.19 on Products which have been classified or re-classified since the adoption of the amended IBC Code in 2004, subject to the endorsement of the MSC and MEPC;

.10 agreed to the draft amendments to the Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973 (resolution MEPC.100(48)), consequential to the amended MARPOL Annex II, as set out at annex 2, for approval at MEPC 55 with a view to adoption at MEPC 56;

.11 agreed to the amended Model Form of the Certificate of Fitness and to the updated list of products contained in Appendix I - Table of Permitted Cargoes under the Guidelines for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels, resolution A.673(16), as set out at annex 7 to document BLG 10/WP.1, and requested the Secretariat to bring this to the attention of DSC 11;

In this context, the Sub-Committee noted that MEPC 55 and MSC 82 would consider draft amendments emanating from BLG 9 (April 2005), SLF 48 (September 2005), BLG 10 (April 2006) and DSC 11 (September 2006) and that for ease of reference a consolidated text of the revised LHNS Guidelines, as amended, would be useful for the end-user.

The Sub-Committee agreed that at an opportune time, it may be wise to consolidate the different provisions for offshore support/supply vessels in a single IMO instrument;

.12 identified the following items that need to be reported by ESPH 12 directly to MEPC 55 and MSC 82, after concurrence by MSC 81:

.1 the result of the evaluation of new products in view of the fact that new substances may be submitted to ESPH 12;

.2 the result of the consolidation of the synonyms of vegetable oils in order to take full advantage of the outcome of the meeting of the GESAMP/EHS Working Group in June 2006;

.3 the review of the MEPC.2 circular on Provisional classification of liquid substances transported in bulk and related matters; and

.4 the result of the consideration of consequential amendments to chapter 19 of the amended IBC Code.

.13 approved the work programme, as set out at annex 3, for the intersessional meeting of the ESPH Working Group in September 2006; and

.14 agreed to invite the MSC and the MEPC to approve the holding of an intersessional meeting of the ESPH Working Group in 2007 (see also paragraph 16.7).

4 DEVELOPMENT OF GUIDELINES FOR UNIFORM IMPLEMENTATION OF THE 2004 BWM CONVENTION

4.1 The Sub-Committee recalled that since 31 May 2005 the International Convention for the Control and Management of Ships' Ballast Water and Sediments (Ballast Water Management Convention) had been open for accession by any State. To date, six countries (in chronological order: Maldives, Saint Kitts and Nevis, the Syrian Arab Republic, Spain, Nigeria and Tuvalu) have ratified or acceded to the Convention, thus becoming Contracting States.

4.2 The Sub-Committee noted that MEPC 53 had adopted five Guidelines relating to ballast water management (i.e., Guidelines for ballast water management equivalent compliance (G3), Guidelines for ballast water management and development of ballast water management plans (G4), Guidelines for ballast water exchange (G6), Guidelines for approval of ballast water management systems (G8) and the Procedure for approval of ballast water management systems that make use of Active Substances (G9)) and had approved an updated programme for the development of the remaining guidelines (MEPC 53/24, annex 6). MEPC 53 also instructed the Secretariat to submit a consolidated text of the Guidelines for additional measures including emergency situations (G13) to BLG 10 for consideration and invited contributions from Member Governments and international organizations.

4.3 The Sub-Committee recalled that MEPC 53 had agreed to establish a correspondence group under the co-ordination of Australia to continue the development of the remaining guidelines in an expeditious manner. The group was instructed to further develop the draft Guidelines for ballast water sampling (G2), Guidelines for risk assessment under regulation A-4 (G7) and Guidelines on designation of areas for ballast water exchange (G14), taking into account the views expressed by the Ballast Water Working Group at its 4th intersessional meeting, and to submit a report to this session.

4.4 The Sub-Committee also recalled that, having noted the workload of the DE Sub-Committee, MEPC 53 had invited Member Governments and international organizations to include design and equipment experts in their delegations to BLG 10 and instructed the

Sub-Committee to further consider the draft Guidelines for ballast water exchange design and construction standards (G11) and Guidelines for sediment control on ships (G12), focusing on aspects related to design and equipment and submit the final drafts to MEPC 55 with a view to adoption.

4.5 The Sub-Committee noted that MEPC 54 had adopted the Guidelines for approval and oversight of prototype ballast water treatment technology programmes (G10) by resolution MEPC.140(54).

4.6 After a brief introduction and discussion of the documents submitted under this agenda item (i.e., BLG 10/4 and BLG 10/4/1 (Secretariat), BLG 10/4/2 (Australia) and BLG 10/4/3 (IACS)), the Sub-Committee agreed to instruct the working group to consider these documents in detail when discussing the respective guidelines.

4.7 The Sub-Committee noted the views expressed at plenary as follows:

.1 Guidelines (G11) and (G12) were extensively considered by the MEPC's Ballast Water Working Group (BWWG) and, therefore, no further changes should be made. However, at the request of some delegations, the Guidelines (G11) were referred to the working group for further consideration, taking into account the comments made in document MEPC 54/2/6;

.2 section 3 of the Guidelines (G13) was considered as too complex and prescriptive and the working group should be instructed to streamline and rationalize it;

.3 due to their reference in the Guidelines for approval of ballast water management systems (G8), one delegation suggested that priority should be given to the development of the Guidelines (G2) to avoid delays in the ballast water management systems approval process. The Sub-Committee requested the working group to consider the possibility of using electronic counting devices for ballast water sampling when further considering the development of the Guidelines (G2); and

.4 one delegation expressed the view that a database on invasive species and other information relevant to introduction of invasive species may significantly facilitate a transparent and accurate decision on establishing additional measures in accordance with regulation C-1 of the BWM Convention.

4.8 The Sub-Committee noted that Mr. Mike Hunter (United Kingdom), who served as Chairman of the Ballast Water Working Group since 2000, was not available to continue to chair the group and expressed its appreciation for his dedication and skilful leadership, wishing him every success in his future career.

Establishment of the working group

4.9 The Sub-Committee agreed to re-establish the Ballast Water Working Group under the chairmanship of Mr. Brian Elliott (United Kingdom) and instructed it, taking into account the comments made in plenary, to:

.1 consider the draft Guidelines for ballast water exchange design and construction standards (G11), contained in document MEPC 53/WP.1, annex 1, and the

comments contained in document MEPC 54/2/6 (Brazil), focusing on aspects related to design and equipment with a view to finalizing the work on these guidelines;

.2 review the draft Guidelines for risk assessment under regulation A-4 (G7) based on the text contained in annex 2 to document BLG 10/4/2 (Australia) and the comments provided in document MEPC 54/2/7 (Brazil) and make recommendations as appropriate;

.3 further develop the draft Guidelines on designation of areas for ballast water exchange (G14) based on the text contained in annex 3 to document BLG 10/4/2 (Australia) and make recommendations as appropriate;

.4 consider the draft Guidelines for additional measures including emergency situations (G13), based on the text contained in document BLG 10/4 (Secretariat) and the comments contained in document MEPC 54/2/6 (Brazil) and make recommendations as appropriate;

.5 further develop, as a matter of urgency, the draft Guidelines for ballast water sampling (G2), based on the text contained in annex 1 to document BLG 10/4/2 (Australia) and the comments contained in document MEPC 54/2/6 (Brazil) and make recommendations as appropriate;

.6 consider documents MEPC 54/2/8 (Austria *et al.* and EC) and MEPC 54/2/10 (CEFIC) and assess the need to develop a methodology for conducting risk-benefit analysis for ballast water discharges; and

.7 submit a written report on the work carried out by the group, including recommendations to MEPC 55, on Thursday, 6 April 2006.

Report of the working group

4.10 The Chairman of the Ballast Water Working Group introduced the report (BLG 10/WP.2) and informed the Sub-Committee that, after some discussion on documents MEPC 54/2/6 (Brazil) and BLG 10/4/3 (IACS), the group did not support the changes suggested and completed the work on the Guidelines for ballast water exchange design and construction standards (G11). The group also finalized the Guidelines on designation of areas for ballast water exchange (G14), for submission to MEPC 55 for consideration and adoption.

4.11 The Chairman also informed that the group completed work on the draft Guidelines for additional measures, including emergency situations (G13), which should be forwarded to FSI 14 for its input and subsequent submission of the final draft to MEPC 55 with a view to adoption by an MEPC resolution.

4.12 The Sub-Committee noted that the group, after having completed the work as indicated in its report, met informally and continued to work on Guidelines for risk assessment under regulation A-4 (G7). The group had extensive discussions on using the species-specific risk assessment and the limitations of this approach and developed new text for section 6.3 of the Guidelines (G7). The updated text, including the changes reported above, will be forwarded to the Secretariat for submission to BLG 11 for further development.

4.13 With regard to the Guidelines for additional measures including emergency situations (G13), Norway, supported by Singapore, expressed reservation regarding the limited advice to the Organization with respect to the procedures for establishing additional measures (section 2.3 of the draft guidelines) and cautioned on the need for clear guidance to Parties when the Convention enters into force.

4.14 Several delegations spoke in favour of the balanced compromise achieved by the working group on this sensitive matter and commended the hard work of the group, while recognizing that, although not perfect, the Guidelines (G13) provide a good basis for the implementation of the BWM Convention.

4.15 With regard to Guidelines (G2), Japan underlined the conclusion of the group that Guidelines (G8) allow the Administrations to assess a ballast water management system for full type approval through sampling and analysis under Guidelines (G8).

Action taken by the Sub-Committee

4.16 Having considered the report of the working group (BLG 10/WP.2), the Sub-Committee approved it in general and took action as indicated below:

.1 agreed to invite the MEPC to consider the adoption of the Guidelines on design and construction to facilitate sediment control on ships (G12) as contained in document BLG 9/WP.2, annex 6, and instructed the Secretariat to prepare a draft MEPC resolution on their adoption to be submitted to MEPC 55;

.2 agreed to invite the MEPC to consider the adoption of the Guidelines for ballast water exchange design and construction standards (G11) as contained in document MEPC 53/WP.1, annex 1, and instructed the Secretariat to prepare a draft MEPC resolution on their adoption to be submitted to MEPC 55;

.3 agreed to invite the MEPC to note the need for a 'guidance document' on arrangements for responding to emergency situations and to instruct the Sub-Committee to develop such a document at BLG 11;

.4 agreed to the draft text of the Guidelines for additional measures including emergency situations (G13) as contained in annex 1 to BLG 10/WP.2 and further agreed to forward the draft text of the Guidelines (G13) to FSI 14 for its input and subsequent submission of the final draft to MEPC 55 with a view to adoption by an MEPC resolution;

.5 agreed to invite the MEPC to adopt the Guidelines on designation of areas for ballast water exchange (G14) as contained in annex 4 of this report and instructed the Secretariat to prepare a draft MEPC resolution on their adoption to be submitted to MEPC 55;

.6 requested the Secretariat to forward the sections relating to port state control of the draft Guidelines for ballast water sampling (G2) to FSI 14 as a basis for discussion when developing the 'Guidelines for port state control under the BWM Convention';

.7 requested the Secretariat to submit an updated version of the draft Guidelines for ballast water sampling (G2), based on the progress made at this session, for further consideration by BLG 11 and invited Member Governments and international organizations to provide papers describing proposed ballast water sampling points designs and evidence of their validation to BLG 11;

.8 requested the Secretariat to submit an updated version of the draft Guidelines for risk assessment under regulation A-4 (G7) based on the progress made at this session, for further consideration to BLG 11;

.9 invited Member Governments and international organizations to provide information on suitable risk-benefit analysis models to MEPC 55; and

.10 requested the MEPC to extend the target completion date of the remaining Guidelines to 2007.

5 REQUIREMENTS FOR PERSONNEL PROTECTION INVOLVED IN THE TRANSPORT OF CARGOES CONTAINING TOXIC SUBSTANCES IN ALL TYPES OF TANKERS

5.1 The Sub-Committee recalled that BLG 9 had established a correspondence group under the co-ordination of Denmark and had instructed it to further consider the draft MSC circular on Structural recommendations for new ships carrying liquids in bulk containing benzene, as set out in the annex to document BLG 9/4/1 (Denmark), taking into account the views expressed at BLG 9, and to submit a report to this session.

5.2 The Sub-Committee noted that MEPC 53 had instructed it to consider proposed amendments to annex 2 of resolution MSC.150(77) on Recommendation for material safety data sheets for MARPOL Annex I cargoes and marine fuel oils (MEPC 53/10/3), in particular the technical content of the Cargo Information Sheet, as outlined in document MEPC 53/10/3 (OCIMF and IPIECA).

Materials safety data sheets (MSDS)

5.3 The Sub-Committee recalled that, at BLG 9, it had agreed to develop mandatory requirements for the use of safety data sheets for ships carrying MARPOL Annex I type cargoes and marine fuel oils, but would not take any further action until after it had considered the forthcoming submission by OCIMF and IPIECA on proposed revisions to the Guidelines for the completion of MSDS for the MARPOL Annex I type cargoes and marine fuel oils, as set out in annex 2 to resolution MSC.150(77).

5.4 Having considered document BLG 10/5 (OCIMF and IPIECA), concerning proposed amendments to annex 2 to resolution MSC.150(77), the Sub-Committee noted the views expressed by several delegations that the proposed replacement for annex 2 did not adequately cover matters related to the reporting of H_2S content and inhalation/dermal hazard information.

5.5 In commenting on document BLG 10/5, the delegation of the United States expressed the view that certain safety information was not included in the proposed cargo information sheet that would be essential to crew safety for the hazards associated with MARPOL Annex I cargoes, in particular:

.1 inhalation and dermal hazard information should be included along with the necessary personal protective equipment;

.2 H_2S content should be reported in both the liquid and vapour concentrations; and

.3 the web address for the additives for the cargo information sheet should include the web address for the cargo material safety data sheets, if available.

5.6 Having considered the above views, the Sub-Committee decided not to amend the Recommendation adopted by resolution MSC.150(77) since it adequately addressed the above issues and was consistent with the Globally Harmonized System of Classification and Labelling of Chemicals and agreed to proceed with making the carriage of material safety data sheets mandatory for the transport of MARPOL Annex I cargoes and marine fuel oils. In this context, the Sub-Committee, after having considered a draft new SOLAS regulation VI/5-1 (BLG 10/WP.10, annex 1) dealing with the matter, agreed to the draft amendment to SOLAS chapter VI, as set out in annex 5, for submission to MSC 82 for approval with a view to subsequent adoption.

Structural recommendations for new ships carrying mixtures of benzene

5.7 The Sub-Committee recalled that BLG 9, after having noted that benzene exposure was not limited to ships covered under the IBC Code, had agreed that the application of any future guidelines should also cover ships carrying MARPOL Annex I cargoes and that the DE Sub-Committee should take part in this work since structural matters also fall under their purview.

5.8 The Sub-Committee considered an oral report from the co-ordinator of the correspondence group (Denmark) referred to in paragraph 5.1 and decided to finalize the aforementioned draft MSC circular at this session on the basis of the annex to document BLG 9/4/1.

5.9 The Sub-Committee, having considered minor modifications to the aforementioned draft MSC circular (BLG 10/WP.10, annex 2), agreed to the draft MSC circular on Voluntary structural guidelines for new ships carrying liquids in bulk containing benzene, as set out in annex 6, for submission to MSC 82 for approval.

Completion of the item

5.10 Having considered the above issues, the Sub-Committee invited MSC 82 to delete this item from its work programme since the work on this matter has been completed.

6 DEVELOPMENT OF PROVISIONS FOR GAS-FUELLED SHIPS

6.1 The Sub-Committee recalled that BLG 9 had established a correspondence group under the co-ordination of Norway and had instructed it to prepare appropriate provisions of draft guidelines for gas-fuelled ships for matters under the Sub-Committee's purview, taking into account document DE 48/19 and the comments on the hazards associated with gas-fuelled engine installations in ships made at BLG 9, and to submit a report to this session. BLG 9 also encouraged Members and international organizations to submit any information on experience with the approval, certification and inspection of gas-fuelled engine installations on board ships to this session.

6.2 The Sub-Committee noted that FP 50 had agreed to delay work on this matter until BLG 10 had considered the report of its correspondence group (BLG 10/6) and had invited Member Governments and international organizations to submit comments and proposals to FP 51, which should take into account the outcome of DE 49 and BLG 10 on this matter.

6.3 The Sub-Committee noted further that DE 49 had agreed to invite BLG 10 to take into account the comments made by IACS in document DE 49/10/1, drawing attention to the need to ensure that the safety level of the arrangements on gas-fuelled ships is equal to that of ships with diesel engine installations; advocating the establishing of a goal-based system approach; and recommending that the experience gained by the offshore industry in the operation of gas-fuelled installations should be utilized. Member Governments and international organizations were invited to submit comments and proposals on the development of provisions for gas-fuelled ships to DE 50, taking into account the outcome of BLG 10, as appropriate.

6.4 The Sub-Committee had for its consideration the report of the correspondence group (BLG 10/6, submitted by Norway), containing a comprehensive, but not yet complete, draft of an International Code of Safety for Gas-fuelled Engine Installations in Ships (IGF Code) and document BLG 10/6/1 (Germany), commenting on the report.

6.5 The Sub-Committee acknowledged that the draft Code as presented by the correspondence group (BLG 10/6, annex) was in very early stages of development and needed substantial further consideration, not only with regard to the detailed technical requirements, where important input from the DE and FP Sub-Committees was needed, but also with regard to more general policy issues, such as the range of applicability to different ship types with possible extra requirements for certain types such as passenger ships and the determination of applicable safety levels.

6.6 Recognizing that the technical requirements as presented by the correspondence group in its report covered different technical subjects, but lacked the focus on primary safety objectives and goals, the Sub-Committee agreed that, for the definition of the level of safety, hazard identification and risk assessments were necessary. However, realizing that this would be a time-consuming exercise, the Sub-Committee agreed that Interim Guidelines for gas-fuelled ships should be developed first, based on the draft contained in document BLG 10/6, which should then be followed by the development of a draft IGF Code.

Establishment of a drafting group

6.7 Following discussion, the Sub-Committee established a drafting group with the following terms of reference:

.1 to prepare an action plan for the further work on the draft Interim Guidelines for gas-fuelled ships, including expected contributions from the DE and FP Sub-Committees, and any other sub-committee which in the view of the group should be involved in the review, for consideration by the Sub-Committee; and

.2 to prepare draft terms of reference for a correspondence group, for consideration by the Sub-Committee.

Report of the drafting group

6.8 Having considered the report of the drafting group (BLG 10/WP.5), the Sub-Committee approved it in general and took action as indicated in the following paragraphs.

Action plan for the further work on provisions of gas-fuelled ships

6.9 Having noted the points raised in the group's report (BLG 10/WP.5, paragraphs 5 to 13), the Sub-Committee agreed to a long-term action plan for the further work on the provisions for gas-fuelled ships as follows:

.1 establishment of a correspondence group at this session;

.2 preparation of the draft Interim Guidelines at BLG 11 for dissemination to the DE, FP and STW Sub-Committees, for consideration of matters under their purview;

.3 establishment of a correspondence group at BLG 11, if necessary;

.4 finalization of the draft Interim Guidelines at BLG 12 (2008), taking into account the input of the DE, FP and STW Sub-Committees, for submission to MSC 84 for approval; and

.5 beginning of development of the draft IGF Code, using the Interim Guidelines as a basis.

Terms of reference for the correspondence group

6.10 To progress the matter intersessionally, the Sub-Committee agreed to establish a correspondence group, under the co-ordination of Norway*, and instructed it to:

.1 further develop the Interim Guidelines on safety for gas-fuelled engine installation in ships, based on the annex to document BLG 10/6 (Norway), taking into account documents DE 49/10/1 (IACS) and BLG 10/WP.5 (paragraphs 5 to 13), and the discussion at BLG 10;

.2 commence work on the identification of the hazard scenarios, safety analysis and collection and consideration of safety analyses already performed for natural gas, taking into account documents BLG 10/6/1 (Germany) and DE 49/10/1 (IACS), with a view towards finalization at BLG 11;

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.3 prepare a detailed action plan for the work to be carried out by other Sub-Committees and revise the long term action plan (see paragraph 6.9), as appropriate; and

.4 submit a report to BLG 11.

6.11 Concerning paragraphs 17.1 and 17.2 of the drafting group report, regarding application of the Interim Guidelines to internal combustion engines using natural gas as fuel and requirements for two separate engine rooms for single fuel installations, the Sub-Committee considered the action requested in those paragraphs to be outside the terms of reference of the drafting group and took no action on them.

Co-ordination of the item

6.12 The Sub-Committee discussed whether the MSC should be requested to re-assign the role of co-ordinator for the item (so far the DE Sub-Committee) to the BLG Sub-Committee, in view of the fact that, clearly, the main expertise on the matter as a whole is available in the BLG Sub-Committee. Following a short debate which showed general support for the proposal, the Sub-Committee agreed to invite MSC 82 to assign the role of a co-ordinator for the item to the BLG Sub-Committee.

7 AMENDMENTS TO RESOLUTION MEPC.2(VI)

7.1 The Sub-Committee recalled that MEPC 49 had agreed to review the "Recommendation on international effluent standards and guidelines for performance tests for sewage treatment plants", adopted by resolution MEPC.2(VI) in 1976, and had invited delegations to submit documents on the matter to MEPC 51. The Sub-Committee further recalled that MEPC 51 had considered a submission by Australia (MEPC 51/17/2), providing information on the practical problems encountered with performance tests on sewage treatment plants in accordance with resolution MEPC.2(VI), and had decided to refer the matter to the Sub-Committee for consideration as a high-priority item with a target completion date of 2006.

7.2 The Sub-Committee also recalled that BLG 9 had considered document BLG 9/7 (Australia), containing comments and information on a number of issues which would require a detailed examination of resolution MEPC.2(VI), and had agreed that the document provided a good basis for the further work needed for the comprehensive review of this resolution. The Sub-Committee further recalled that, in order to progress the work in the intersessional period, BLG 9 had established a correspondence group, under the co-ordination of Australia, and instructed it to prepare a draft text of the proposed amendments to the Recommendation on international effluent standards and guidelines for performance tests for sewage treatment plants (resolution MEPC.2(VI)), using document BLG 9/7 as a basis, and report back to this session.

Establishment of a drafting group

7.3 The Sub-Committee, having considered the outcome of the correspondence group contained in document BLG 10/7, in particular paragraph 52.1 and issues contained in the square brackets of the annex, agreed to establish a drafting group to deal with the matter and instructed it, taking into consideration the comments made in plenary, to:

.1 finalize the draft text of the Revised Guidelines on implementation of effluent standards and performance tests for sewage treatment plants to resolution MEPC.2(VI), using the annex to document BLG 10/7 as a basis; and

.2 prepare a draft MEPC resolution on the adoption of the Revised Guidelines.

Report of the drafting group

7.4 Having received the report of the drafting group (BLG 10/WP.4), the Sub-Committee approved the report in general and agreed to the draft Revised Guidelines on implementation of effluent standards and performance tests for sewage treatment plants, and the associated draft MEPC resolution on their adoption, set out at annex 7, for submission to MEPC 55 for consideration with a view to adoption. In this context, the MEPC was invited to consider the application date for the Guidelines, and the issue relating to levels of residual disinfectants and decide on the numbers in square brackets in paragraph 5.7.1 of the Revised Guidelines, concerning the disinfectant residual in the effluent.

Completion of the work

7.5 The Sub-Committee considered that work on the item has been completed and agreed to invite the MEPC to delete the item from the work programme of the Sub-Committee.

8 DEVELOPMENT OF STANDARDS REGARDING RATE OF DISCHARGE FOR SEWAGE

8.1 The Sub-Committee recalled that MEPC 49 had agreed to a proposal by Singapore (MEPC 49/13/2) regarding the urgent need to develop standards for the establishment of the rate of discharge of sewage stored in holding tanks as required by regulation 11.1.1 of the revised MARPOL Annex IV, and had invited delegations to submit proposals to MEPC 51 for consideration. Furthermore, MEPC 51, recognizing that this issue needed careful consideration from the viewpoint of sewage generated by humans as well as effluent produced by livestock on board ships, had decided to refer the matter to the Sub-Committee as a high-priority item with a target completion date of 2006.

8.2 The Sub-Committee also recalled that, in order to progress the work in the intersessional period, BLG 9 had agreed to instruct the correspondence group referred to in paragraph 7.2 to also develop draft standards for the establishment of the rate of discharge for sewage that has been stored in holding tanks on board ships, as required by regulation 11.1.1 of the revised MARPOL Annex IV.

8.3 The Sub-Committee further recalled that BLG 9 had considered a proposal by Australia (BLG 9/8) for a Unified Interpretation of regulation 11.1.1 of the revised Annex IV of MARPOL with respect to discharges of sewage not held in holding tanks, suggesting that regulation 11.1.1 allows the direct overboard discharge of sewage that has not been stored in holding tanks at a distance of more than 12 nautical miles from nearest land without the ship having to observe any of the other discharge requirements referred to in this regulation (minimum speed, being en route, and moderate discharge rate).

8.4 In this respect the Sub-Committee noted that, at BLG 9, a number of delegations, while recognizing the practical problems associated with the large volumes of sewage generated by animals onboard livestock carriers, expressed their concern on the possible adverse

environmental impact that the application of the proposed unified interpretation might have, if such discharge takes place in environmentally sensitive areas, shallow waters or with high discharge rates. At the same time, the Sub-Committee also noted that other delegations, in expressing their support for the proposal by Australia, were of the view that, taking into account the relevant provisions of MARPOL Annex IV, there should be no additional restrictions to the discharge of sewage not stored in holding tanks at a distance of more than 12 nautical miles from the nearest land.

8.5 The Sub-Committee recalled that BLG 9, having recognized that the effluent generated by animals on board livestock carriers needs to be disposed of in a practical, effective and environmentally friendly manner and that there is currently no realistic cost-effective alternative to overboard discharge in the open sea, had agreed to task the correspondence group referred to in paragraph 7.2, to further consider the issue of the discharge at a distance of more than 12 nautical miles from the nearest land of untreated and not stored in holding tanks animal effluent from livestock carriers, with the aim of developing an appropriate recommendation for consideration at this session.

8.6 Having considered the part of the report of the correspondence group (paragraphs 52.2 to 52.5 of BLG 10/7) dealing with the above issues and document BLG 10/7/1 (ICCL), the Sub-Committee took the following action:

.1 agreed to a standard rate of discharge of untreated and undiluted sewage from holding tanks of 1/200,000 of hourly swept volume as a maximum permissible discharge which should apply to all ships and a swept volume definition for the discharge of untreated and undiluted sewage from holding tanks that is not comminuted or disinfected as "ship breadth x draught x distance travelled" (paragraph 39 of document BLG 10/7), which should appear as a footnote to regulation 11.1.1 of the revised MARPOL Annex IV in the publication of the consolidated edition of MARPOL 73/78;

.2 agreed that a standard rate for the discharge does not apply to sewage that is comminuted or disinfected that may be held in holding tanks;

.3 agreed that no recording requirements for sewage discharges under regulation 11.1.1 of the revised MARPOL Annex IV are necessary; and

.4 agreed to a draft amendment to regulation 11 of the revised MARPOL Annex IV, as set out in annex 8, to include untreated sewage from spaces containing living animals, for submission to MEPC 55 for approval and subsequent action as appropriate.

Completion of the work

8.7 The Sub-Committee considered that work on the item has been completed and agreed to invite the MEPC to delete it from the work programme of the Sub-Committee.

9 CONSIDERATION OF IACS UNIFIED INTERPRETATIONS

9.1 The Sub-Committee, recalling that document BLG 10/9 (IACS), containing IACS UI's MPC 82, MPC 83 and MPC 84 relating to MARPOL Annex VI, has been dealt with under agenda item 14, considered document BLG 10/9/1 (IACS), informing of the text of IACS UI

SC 188, concerning an interpretation of SOLAS regulation II-2/4.5.1.1 with regard to pump-rooms intended solely for ballast transfer or fuel oil transfer.

9.2 Following debate, which showed general support for the interpretation, the Sub-Committee requested the Secretariat to prepare a draft MSC circular annexing the text of the interpretation as agreed and, having considered the text of the proposed draft interpretation (BLG 10/WP.7), agreed to a draft MSC circular on Interpretation to SOLAS regulation II-2/4.5.1.1, set out in annex 9, for submission to MSC 82 for approval.

9.3 The delegation of the United States, while thanking IACS for the information regarding Unified Interpretation SC 188, expressed concern about the interpretation which arose out of an interpretation agreed by the FP Sub-Committee and, in their view, was weakening SOLAS requirements. Specifically, they stated that SOLAS was generally designed to prevent a serious problem because of one failure of construction or equipment. In the case at hand, the intent of SOLAS regulation II-2/4.5.1.1 was to make sure that a failure of a bulkhead between a cargo tank and a ballast tank would not result in oil being pumped in a pump-room that was designed to pump only water and not designed to pump oil. They also pointed out that the chemical and gas Codes provided safety in case of a failure of one bulkhead, so the SOLAS requirement based on one bulkhead failure was standard practice. But this was a case where a unified interpretation agreed by the FP Sub-Committee was used to weaken SOLAS because it was assumed, under the unified interpretation, that there would be no bulkhead failure resulting in oil entering a ballast space. In the view of the United States delegation, the matter should be brought to the attention of the MSC and the FP Sub-Committee with a view to reconsidering this unified interpretation.

10 CASUALTY ANALYSIS

10.1 The Sub-Committee recalled that MSC 80, when receiving updated information from ICS concerning the work of the Inter-Industry Working Group (IIWG) established to study reported incidents of explosions on chemical and product carriers, had invited the IIWG to submit its interim report to FP 50, STW 37, DE 49 and BLG 10, and instructed these Sub-Committees to submit their consequent comments on the interim report to MSC 81.

10.2 The Sub-Committee noted document BLG 10/10 (CEFIC, IACS, IAPH, ICS, INTERTANKO, IPTA and OCIMF), informing it that, during the deliberations of the IIWG, it was agreed that, in view of the complexity of the casualties and the time taken to complete the investigations, it would be premature to make interim recommendations to the relevant Sub-Committees. It further noted information by ICS that, in the meantime, the IIWG had completed its report, which had been submitted to MSC 81 for appropriate action (MSC 81/8/1 and MSC 81/INF.8). In view of the above, the Sub-Committee agreed that no action on the subject was necessary at this point in time.

10.3 Some delegations expressed their disappointment with the delay in the finalization of the IIWG report which they had expected to be considered at this session. They found it regrettable that gaining access to a sufficient number of investigation reports, which was the main reason for the delay, had sometimes be challenging for the group.

10.4 The Venezuelan delegation expressed its concern at the results submitted: certain recommendations by States in respect of operational practices and the technical characteristics of specific products should be treated as a priority by other IMO bodies, such as the DSC Sub-Committee. It urged the Inter-Industry Working Group to take account of that concern in the report to be submitted to MSC 81.

11 SAFETY ASPECTS OF BALLAST WATER MANAGEMENT

11.1 The Sub-Committee recalled that MSC 80 had decided to move the item from the provisional agenda of DE 49 to the provisional agenda for this session of this Sub-Committee. The Sub-Committee noted that DE 48, when considering the item, had agreed that the remaining areas of transitory non-compliance with safety regulations when conducting ballast water exchange were dealt with by other sub-committees and, therefore, the DE Sub-Committee did not need to consider the matter any further. The Sub-Committee further noted that DE 48 had commented on the then draft Guidelines for approval of ballast water management systems (G8) and had agreed to consider the remaining guidelines and procedures when viable drafts were available and as instructed by the MEPC.

11.2 The Sub-Committee noted that MSC 79 had approved proposed amendments to SOLAS regulation V/22 concerning transitory non-compliance with SOLAS when conducting ballast water exchange, with a view to adoption at MSC 81, and MSC/Circ.1145 on Precautionary advice to masters when undertaking ballast water exchange. The Sub-Committee also noted that SLF 48 had agreed to recommend to the MSC that no transitory deviation from safety standards within the SLF Sub-Committee's purview (i.e., intact and damage stability and load lines standards), should be permitted during ballast water exchange and had invited MSC 81 to concur with this view. In addition, MEPC 54 had noted the Sub-Committee's recommendation.

11.3 The Sub-Committee, recalling that it was dealing with the remaining guidelines and procedures under agenda item 4 (Development of guidelines for uniform implementation of the 2004 BWM Convention) and that the issue of transitory non-compliance with safety regulations when conducting ballast water exchange had been dealt with and completed by other sub-committees, namely NAV and SLF, within their competence (see paragraph 11.2), agreed that no further action was necessary on the matter. Noting that the item was still in the work programme of the DE Sub-Committee, pending the outcome of this session, the Sub-Committee agreed to invite the MSC to delete the item from the work programme of the DE Sub-Committee.

12 GUIDELINES ON EQUIVALENT METHODS TO REDUCE ON-BOARD NOx EMISSION

12.1 The Sub-Committee recalled that DE 48 had noted document DE 48/INF.3 (Japan), containing draft Guidelines for marine selective catalytic reduction systems, and agreed to consider it further at DE 49 under the item on "Guidelines on equivalent methods to reduce on-board NOx emissions" which had been included in the provisional agenda for that session. DE 48 further instructed the Secretariat to issue the document in the three working languages as a session document for DE 49. In pursuance of the decision of MSC 80 to move the item to the provisional agenda for BLG 10, the Secretariat issued the above information paper as document BLG 10/12.

12.2 The Sub-Committee noted that MEPC 53 had instructed it to also take into account document MEPC 53/4/15 (Japan), containing a proposal for marine selective catalytic reduction (SCR) systems.

12.3 The Sub-Committee considered the submissions under this agenda item, i.e. BLG 10/12, BLG 10/12/1 and BLG 10/12/2 (Japan) and, after discussing the actual need for the proposed guidelines and the possibility that they may be redundant or in need of extensive updating after the revisions of MARPOL Annex VI and the NOx Technical Code have been finalized, agreed

that there was no need for such guidelines, and that the MEPC should be invited to delete the item from the work programme of the DE Sub-Committee.

13 GUIDELINES ON OTHER TECHNOLOGICAL METHODS VERIFIABLE AND ENFORCEABLE TO LIMIT SOx EMISSION

13.1 The Sub-Committee noted that MEPC 53 had recalled that MARPOL Annex VI regulation 14(4)(c) calls for the development of guidelines on "any other technological method that is verifiable and enforceable to limit SOx emissions to a level equivalent to an exhaust gas cleaning system described under regulation 14(4)(b) of Annex VI. As blending of fuel oil is now considered as an option to reach compliance with SOx Emission Control Area regulations, MEPC 53 agreed that the development of guidelines for such technology was urgent.

13.2 Consequently, MEPC 53, taking into account the overloaded agenda for DE 49, agreed that the development of the Guidelines on any other technological methods verifiable and enforceable to limit SOx emissions to a level equivalent to an exhaust gas cleaning system required under regulation 14(4)(b) of MARPOL Annex VI, should be transferred from the work programme of the DE Sub-Committee to the work programme and provisional agenda for BLG 10, with a target completion date of 2007.

13.3 The Sub-Committee also noted that the term "other technological methods**"** in practice today means blending of different fuels with different sulphur content. This may entail many challenges for the crew to ensure the sulphur level really is within the required limit and also raises questions regarding documentation and safety. "Other technological methods" may also in the future comprise emission trading or other mechanisms if the guidelines to be developed will be open for such instruments.

13.4 The Sub-Committee noted that there were no submissions under this agenda item and, in order to make progress, invited Member Governments and international organizations to submit relevant comments and proposals to BLG 11, in particular proposals for draft guidelines that could be used as the basis for further discussion.

14 REVIEW OF MARPOL ANNEX VI AND THE NOx TECHNICAL CODE

14.1 The Sub-Committee noted that MEPC 53 had recalled that it was widely acknowledged by marine engine manufacturers that different technology improvements now exist that would enable significant improvement of the existing standards in MARPOL Annex VI and that MARPOL Annex VI, with regard to control of NOx emissions, only applied to engines installed on or after 1 January 2000, and that emissions of particulate matter (PM), volatile organic compounds (VOCs) in general, greenhouse gas emissions (GHGs), alternative fuel use, and propulsion systems other than diesel engines, were not addressed by the current MARPOL Annex VI.

14.2 The Sub-Committee recalled that, having considered relevant submissions and after a general discussion, MEPC 53 agreed to initiate a general review of MARPOL Annex VI and the NOx Technical Code, recognizing that such revision work might take two to three years. Consequently, MEPC 53 included an item on review of MARPOL Annex VI and the NOx Technical Code in the work programme of the Sub-Committee and in the provisional agenda for this session, with a target completion date of 2007.

14.3 MEPC 53, having agreed that documents MEPC 53/4/12 (Norway), MEPC 53/4/5 and MEPC 53/4/13 (EUROMOT) and MEPC 53/4/21 (United States) should be taken into consideration in connection with the general review of MARPOL Annex VI, approved the following terms of reference for the review of MARPOL Annex VI and the NOx Technical Code by the Sub-Committee:

.1 examine available and developing techniques for reduction of emission of air pollutants;

.2 review the relevant technologies and potential for reduction of NOx, and recommend future limits of NOx emission;

.3 review technology and the need for reduction of SOx, justify and recommend future limits of SOx emission;

.4 review relevant technology and the need and potential for reduction of VOC, and recommend future control of VOC emission;

.5 with a view to controlling emissions of particulate matter (PM), study current emission levels of PM from marine engines, including their size distribution, quantity, and recommend actions to be taken for the reduction of PM from ships. Since reduction of NOx and SOx emission is expected to also reduce PM emission, estimate the level of PM emission reduction through this route;

.6 consider reducing NOx and PM limits for existing engines;

.7 consider whether MARPOL Annex VI emission reductions or limitations should be expanded to include diesel engines that use alternative fuels and engine systems/power plants other than diesel engines; and

.8 review the texts of MARPOL Annex VI, the NOx Technical Code and related guidelines and recommend necessary amendments.

14.4 In the context of the item, the Sub-Committee noted that MARPOL Annex VI, Regulations for the Prevention of Air Pollution from Ships, had entered into force on 19 May 2005. As of 9 February 2006, the Protocol of 1997 to MARPOL 73/78 (Annex VI) had 30 Parties, representing approximately 63.73% of the gross tonnage of the world's merchant shipping. All engines installed in ships after 1 January 2000 with a power output of more than 130 kW meet the requirements laid down in Annex VI with regard to emission of NOx.

14.5 The Sub-Committee agreed that the detailed technical submissions under the agenda item should not be presented or discussed in plenary but be forwarded directly to the Working Group on Air Pollution for consideration and that only submissions which required decisions to be taken by the Sub-Committee should be presented and debated in plenary. The Sub-Committee also agreed that there was no need to introduce or consider the documents transferred from MEPC 53 in plenary, but that the working group should take them into consideration during its work. The following submissions were considered by plenary: BLG 10/14/2 (Norway), BLG 10/14/4 (Sweden), BLG 10/14/5 (ICS, BIMCO, INTERCARGO, ICCL and INTERTANKO), BLG 10/14/7 (IACS), BLG 10/14/9 and BLG 10/14/11 (Japan), BLG 10/14/12 (EUROMOT), BLG 10/14/13 (FOEI), BLG 10/14/14 (IPIECA and OCIMF), BLG 10/14/15 (the Netherlands and the United States) and BLG 10/14/16 (Denmark).

14.6 The Sub-Committee recalled the decision by MEPC 54 to transfer the following documents to BLG 10: MEPC 54/4/4 (Republic of Korea), MEPC 54/4/6 (Sweden) and MEPC 54/4/11 (INTERTANKO), to be considered in connection with the revision of MARPOL Annex VI and the NOx Technical Code and agreed to refer the documents to the working group for consideration during its work.

14.7 The Sub-Committee considered document BLG 10/14/3 (Germany and Sweden) containing a proposal to initiate a standardization process for on-shore power supply (cold ironing) and noted that MEPC 54 had agreed that standardized power supply connections could benefit the industry but that further studies were needed before any decision could be made. MEPC 54 noted the information provided by the International Association of Ports and Harbors (IAPH) that work on standardization is ongoing and that a meeting on the subject between IAPH and the shipping industry was deferred until after MEPC 54 in order to consider IMO's views on the matter before making a final conclusion. IAPH offered to co-operate with IMO on further work. MEPC 54 also noted the view of the delegation of Venezuela to involve the IAPH, and in particular, the Inter-American Commission of Ports, as the appropriate forums. MEPC 54 further noted the ongoing work in the International Organization for Standardization (ISO) related to on-shore power supply and instructed the Secretariat to liaise with relevant international and intergovernmental organizations and report its findings to MEPC 55. The Sub-Committee therefore agreed that there was no need for the working group to consider the issue further.

14.8 The Sub-Committee noted that the contribution of ship emissions to air quality problems in many parts of the world is growing, and that many Governments are now considering how to better address ship emissions at local, national and international levels. Emissions from marine diesel engines are of concern to the international community because of their negative environmental effects such as eutrophication, acid deposition and nitrification and also the adverse impact on human health and life quality.

14.9 The Sub-Committee noted further that it is widely acknowledged by scientists and marine engine manufacturers that different technology improvements now exist that will enable significant improvement over the existing emission standards found in the current MARPOL Annex VI, especially for new engines. However, leading manufacturers have revealed that significant emission improvements can also be achieved also in engines manufactured before 2000 through valve upgrades and other adjustment procedures that are feasible through routine maintenance of the engines.

14.10 The Sub-Committee agreed that, given the long lifetime of the average marine diesel engine, retrofitting existing engines would deliver emission reduction quicker than applying abatement regulations to new engines only. The Sub-Committee noted that existing engines should also be considered by the working group during the revision for possible inclusion in the revised MARPOL Annex VI, as given in the terms of reference for the revision agreed at MEPC 53, and instructed the working group accordingly.

14.11 The Sub-Committee recalled that MEPC 53 had approved 11 Unified Interpretations (UIs) to MARPOL Annex VI (issued as MEPC/Circ.473) and with regard to the UIs on which agreement could not be reached since they were considered to be amendments, MEPC 53 had agreed to include those proposals in the general revision of MARPOL Annex VI.

14.12 The Sub-Committee agreed that document BLG 10/9 (IACS) should be considered under agenda item 14 (Review of MARPOL Annex VI and the NOx Technical Code) and that this was in line with decisions taken by both MEPC 53 and MEPC 54, to transfer all documents related to

the interpretation of the two instruments to the BLG Sub-Committee for consideration in connection with the revision process.

14.13 The Sub-Committee also agreed also that a common basis and understanding of the different emission types from marine diesel engines was essential in order to make progress and to reach the best possible solution in the end. Due to the fact that much action has already been taken to reduce emissions from land-based sources, it now seems to be cost-effective to reduce emissions from shipping instead of further reduction onshore.

14.14 The Sub-Committee agreed that the revision should be related to the best available technology and be based on a scientific basis with due regard to environmental needs and cost-benefit analyses. The working group was instructed to consider the establishment of long-term standards for marine vessels based on a common basis and advanced technologies that are already used on many land-based engines, and which have been successfully applied to a growing number of marine vessels.

14.15 The Sub-Committee considered document BLG 10/14/16 (Denmark) and recalled that MARPOL Annex VI, regulation 18, places requirements on shipowners in respect of bunker delivery notes and representative samples of the fuel received for use on board. The Sub-Committee recognized that there might be problems in connection with the documentation of fuel oil quality required by MARPOL Annex VI for ships in regular service on short international routes, where bunkering takes place several times a day, and instructed the working group to consider the issue further.

14.16 The Sub-Committee noted an intervention by INTERTANKO, supported by several other delegations, that presentations and interventions made during the discussion had not addressed the human element. INTERTANKO considered this to be an important element which the working group should take into account in its revision work. INTERTANKO noted that some of the submissions and interventions had encouraged measures to reduce air emissions by using onboard abatement technologies, also called "after treatment control measures". Those submissions and interventions suggested that the use of onboard technologies is more economical than treatment on shore. INTERTANKO therefore suggested that IMO should consider whether the operation of such technologies first of all, is safer to be undertaken onboard ships rather than on shore. It further recommended that safety of the crew and the ship should be given high priority in the development and adoption of a final solution.

Work programme for the revision process

14.17 The Sub-Committee recalled that MEPC 54 had acknowledged that the revision of MARPOL Annex VI, the NOx Technical Code and related Guidelines would be complex and partly of a technical nature and that the work is considered to be of utmost importance for the image of both IMO and the entire shipping industry.

Intersessional working group meeting

14.18 The Sub-Committee recalled that MEPC 54 had decided, in order to progress the revision work, to instruct BLG 10 to make arrangements for an intersessional working group meeting to be held before the end of 2006. The report on the outcome of the intersessional working group meeting should be submitted to BLG 11, and BLG 11 should then, if possible, agree on the final draft revision of MARPOL Annex VI and the NOx Technical Code. The final draft of the annex should subsequently be forwarded to MEPC 56, to be held in July 2007, for consideration and

possible approval. In this connection, the Sub-Committee welcomed the information that Norway had offered to host the intersessional meeting to be held mid-November (tentative dates 13 to 17 November 2006, to be confirmed).

14.19 The Sub-Committee agreed that the working group should consider how best to utilize the Intersessional Working Group meeting and also the need to establish a correspondence group, or possibly more than one correspondence group, in order to progress the matter prior to the Intersessional Working Group meeting.

Establishment of the Working Group on Air Pollution

14.20 The Sub-Committee agreed to establish a Working Group on Air Pollution at this session under the chairmanship of Mr. Bryan Wood-Thomas (United States) and instructed it, taking into account the comments and decisions made in plenary, to:

.1 consider the documents submitted under agenda item 14 and document BLG 10/9 and make recommendations as appropriate;

.2 as instructed by MEPC 53 (BLG 10/14/1):

.2.1 examine available and developing techniques for reduction of emission of air pollutants;

.2.2 review the relevant technologies and potential for reduction of NOx, and recommend future limits of NOx emission;

.2.3 review technology and the need for reduction of SOx, justify and recommend future limits of SOx emission;

.2.4 review relevant technology and the need and potential for reduction of VOC, and recommend future control of VOC emission;

.2.5 with a view to controlling emissions of particulate matter (PM), study current emission levels of PM from marine engines, including their size distribution, quantity, and recommend actions to be taken for the reduction of PM from ships. Since reduction of NOx and SOx emission is expected to also reduce PM emission, estimate the level of PM emission reduction through this route;

.2.6 consider reducing NOx and PM limits for existing engines;

.2.7 consider whether MARPOL Annex VI emission reductions or limitations should be expanded to include diesel engines that use alternative fuels and engine systems/power plants other than diesel engines; and

.2.8 review the texts of MARPOL Annex VI, the NOx Technical Code and related guidelines and recommend necessary amendments;

.3 take the following IMO resolutions and circulars into account, as appropriate, when considering reducing NOx and PM limits for existing engines: resolution

A.500(12), resolution A.777(18), resolution A.900(21), MSC/Circ.1099 and MEPC/Circ.405;

.4 consider how best to utilize the Intersessional Working Group meeting, and if appropriate, propose a draft agenda;

.5 consider the need for the establishment of correspondence groups (possibly one for MARPOL Annex VI and another for technical matters and related codes and guidelines such as the NOx Technical Code), and if appropriate, draft terms of reference for the group(s) for consideration by the Sub-Committee;

.6 report on the progress of the work of the group during BLG 10 and the work plan for the revision process to plenary in a written report by Friday, 7 April 2006; and

.7 submit a written report on the outcome of the revision work to the Intersessional Working Group.

Report of the working group

14.21 Having received and considered the report from the Working Group on Air Pollution (BLG 10/WP.3 and BLG 10/WP.3/Add.1), the Sub-Committee approved the report in general and, in particular:

1. noted the group's considerations with regard to the review of MARPOL Annex VI and the NOx Technical Code and that the essential purpose during this session has been to examine available and developing techniques for reduction of emission of air pollutant from ships;

.2 noted the group's considerations with regard to particulate matter (PM) and its effect on the environment and human health and that PM is largely a function of fuel oil quality and that the use of clean low sulphur fuels is one of the most direct means of achieving PM reduction;

.3 noted the group's considerations with regard to the possibility of reducing VOC emissions by introducing a requirement for a VOC management plan;

.4 noted that the working group's considerations on Thursday and Friday will be prepared soon after this session in time for its consideration by the Intersessional meeting of the Working Group;

.5 noted that the intersessional meeting of the Working Group is planned to be held in Norway in November 2006;

.6 approved the terms of reference for the Intersessional Meeting of the Working Group as set out in annex 10 and instructed the Intersessional Working Group to continue the work of BLG 10 on the revision of MARPOL Annex VI, the NOx Technical Code and related guidelines and consider relevant documents transferred from MEPC 53 and MEPC 54, submitted to BLG 10 and to the Intersessional Working Group meeting;

.7 noted the working group's considerations with regard to the need for an Intersessional Correspondence Group on Amendments to the Regulations under MARPOL Annex VI and agreed to establish the group under the co-ordination of United States*, and approved the terms of reference, as set out in annex 11;

.8 noted the working group's considerations with regard to the need for an Intersessional Correspondence Group on amendments to the NOx Technical Code, VOCs and issues related to improved implementation of MARPOL Annex VI and agreed the establish the group under the co-ordination of Norway**, and approved the terms of reference, as set out in annex 12;

.9 agreed to instruct the Secretariat to issue the invitation for the Intersessional Meeting of the Working Group as soon as possible; and

.10 agreed to the unified interpretations concerning implementation of MARPOL Annex VI and the NOx Technical Code and related implementation issues, set out in annex 13, for submission to MEPC 55 for consideration with a view to approval.

14.22 The delegation of Greece, supported by China, stated that column 3 (Additional engine controls), in annex 3 to BLG 10/WP.3, should be deleted, as it pertains to emission control technology that is not yet proven. The Chairman of the working group noted that the content of the annex and this specific point in particular were discussed in the working group and that the intention of the tables in the annexes was to capture the full range of technology applications under development in the industry. The delegation of Norway also noted that the tables concerning NOx reduction technologies had been extensively debated and agreed upon by the group. A number of delegations further noted that it was inappropriate for plenary to amend the report of the working group. It was noted that the respective tables were designed to assist in informing interested stakeholders and that the information will not serve to prejudice any future discussion on what technologies might be most appropriate for achieving a given standard.

14.23 The observer from IACS noted that the majority of the Unified Interpretations (UIs) to MARPOL Annex VI and the NOx Technical Code, brought forward in document BLG 10/14 by IACS, had not yet been considered and could be ignored as these would help the effective implementation of MARPOL Annex VI. The remainder of the UIs in BLG 10/14 needed to go forward for further consideration. The observer from IACS informed the Sub-Committee that IACS would continue to apply these UIs in the meantime, unless advised otherwise by the Administrations.

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14.24 The Chairman of the working group recalled that the proposed unified interpretations, submitted by IACS, had been considered both by MEPC and the DE Sub-Committee and had been the subject of extensive review. Many of the proposed interpretations were considered to constitute amendments to MARPOL Annex VI. Recognizing this, it was considered inappropriate to adopt interpretations that would constitute amendments to a legally binding instrument. The Chairman of the working group further noted that there was broad support to address many of the outstanding issues, but that these issues would need to be addressed as draft amendments to MARPOL Annex VI and the NOx Technical Code. In its decision to undertake a review of MARPOL Annex VI, MEPC 53 had recognized that numerous issues in the Annex required further clarification to facilitate better implementation of the Annex and the NOx Technical Code. As stated in the terms of reference for the intersessional meeting of the working group, all relevant papers transferred from MEPC and submitted to BLG 10 would be considered in connection with the ongoing revision process.

14.25 Noting that the group continued its work during the week, the Sub-Committee noted an oral report from the Chairman of the working group on the progress made in the group after the report was submitted.

15 AMENDMENTS TO MARPOL ANNEX I FOR THE PREVENTION OF MARINE POLLUTION DURING OIL TRANSFER OPERATIONS BETWEEN SHIPS AT SEA

15.1 The Sub-Committee recalled that MEPC 53 had agreed to include a high-priority item on "Amendments to MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea" in the work programme of the BLG Sub-Committee and in the provisional agenda of BLG 10, with a target completion date of 2007 (MEPC 53/24, paragraph 20.6).

15.2 The Sub-Committee also noted that MEPC 53, in reaching that decision, recognized that the technical and operation issues pertaining to the potential risk of pollution during ship to ship transfer of oil cargoes at sea should be considered by the Sub-Committee, taking into account the principles of international maritime law, for example, UNCLOS, and that the rights and obligations of coastal and flag States should be the guiding principles.

15.3 The Sub-Committee had for its consideration documents BLG 10/15 (Spain and Mexico) with a proposal to add a new chapter 8 and Appendix IV to the revised MARPOL Annex I, regulating oil transfer operations at sea, and BLG 10/15/1 (OCIMF and ICS), BLG 10/15/2 (Australia) and BLG 10/15/3 (Denmark) with comments on the proposal.

15.4 In introducing document BLG 10/15, the delegation of Spain, also on behalf of Mexico, highlighted the main elements contained in the proposal as follows:

.1 addition of a new chapter 8 to the revised Annex I of MARPOL 73/78, setting out, in regulatory form, the conditions required for ensuring safety and preventing pollution during ship-to-ship (STS) oil transfer operations at sea which would take into account the recommendations contained in the ICS/OCIMF publication "Ship to Ship Transfer Guide", as well as relevant expert opinion and international experience;

.2 oil fuel supply operations between ships should also be covered by the regulations;

.3 restrictions, or a ban, to be established within Special Areas or Particularly Sensitive Sea Areas (PSSAs); and

.4 the coastal State off whose shores oil transfer operations take place should have the right to monitor them and to establish special conditions for, or suspend, them according to circumstances and depending on the case, including cases when they take place on the high seas outside that State's jurisdiction but are likely to affect its coastline.

15.5 OCIMF, in introducing document BLG 10/15/1, also on behalf of ICS, expressed support, in principle, for the concept of regulations covering certain aspects of STS oil transfer operations at sea, including oil fuel transfer operations, provided such measures are fully evaluated and justified. However, they mentioned the low level of incidents arising out of this activity worldwide. In addition, OCIMF emphasized that the 4th edition of the OCIMF/ICS "Ship-to-Ship Transfer Guide (Petroleum)" provides up-to-date industry standards and best practice for managing these operations.

15.6 As regards certain specific proposed regulations in document BLG 10/15, OCIMF/ICS, however, could not support some of them, including unnecessary controls or bans in Special Areas or PSSAs, control of operations in adjoining States' territorial waters and others, being of the opinion that they should be referred to the Legal Committee for consideration. Finally, OCIMF/ICS also provided detailed technical and operational comments on the proposed new regulations.

15.7 Australia (BLG 10/15/2) expressed agreement, in general, with the need for the proposed amendments in order to ensure that STS oil transfer operations are carried out so as to minimize the risk to the marine environment, however, it questioned the need to extend application of the new regulatory regime to FPSOs and FSUs and underlined the need to carefully consider a ban in Special Areas and PSSAs, especially with regard to routine operations of small vessels, including fishing boats.

15.8 Denmark (BLG 10/15/3) also expressed support for the need for regulations covering certain aspects of STS oil transfer operations, including operations outside the territorial waters of a coastal State. Whilst providing comments regarding several of the proposed regulations, Denmark supported the establishment of a correspondence group where further discussion could take place on important aspects of the proposed regulations, such as scope, legal concerns, notification regime, operational requirements, neighbouring States, etc.

General discussion

15.9 The Sub-Committee debated in depth the proposal by Spain and Mexico and the comments by OCIMF/ICS, Australia and Denmark. In the course of the discussion, the main points made were as follows:

.1 all delegations who spoke expressed their appreciation to Spain and Mexico for their proposal to regulate STS oil transfer operations at sea which provided the opportunity for IMO to consider adequate measures to regulate this activity, following its noticeable growth in the last years;

.2 all delegations who spoke were of the view that an intersessional correspondence group should be established to further pursue the development of suitable regulations after receiving adequate guidance from the Sub-Committee;

.3 it was recognized that imposing too stringent regulations within the territorial sea by a coastal State exercising its sovereign rights could result in STS oil transfer operations being driven offshore into the high seas, where more difficult meteorological conditions were likely to prevail, thus rendering operations less safe and more hazardous for the marine environment;

.4 the pre-eminence of UNCLOS requirements over those of the MARPOL Convention was unanimously recognized by the Sub-Committee, especially if regulations affecting STS oil transfer operations in the high seas were to be considered;

.5 several delegations were of the opinion that the Organization's Legal Committee should be consulted on the scope and contents of the proposed regulations, particularly with regard to those touching legal aspects under the purview of UNCLOS;

.6 a number of delegations, however, was of the opinion that the Legal Committee should not be treated as a "dumping ground" whereto proposed legislation was referred (with a likely delay in the expected time of its adoption) and that delegations should include legal experts capable of dealing with any issues that might arise when discussing proposed new legislation under the purview of the different bodies of the Organization;

.7 it was fully recognized that regulation of STS oil transfer operations occurring within the territorial sea was a matter of the exclusive right of the coastal States concerned and that the intended new chapter 8 of the revised MARPOL Annex I should also address the regulation of this activity outside the territorial sea, i.e., in the Exclusive Economic Zone or in the high seas, as appropriate;

.8 on the possible application of the proposed amendments to Floating Production Storage and Offloading Units (FPSOs) and Floating Storage Units (FSUs), the majority of delegations who intervened in the debate were of the opinion that this matter merited careful consideration before a conclusive decision could be reached. It was recognized, however, that the matter could be solved at a later stage, even after approval of the proposed regulations, by means of a suitable amendment to resolution MEPC.139(53) on application of MARPOL Annex I regulations to FPSOs and FSUs; and

.9 several delegations proposed to include MARPOL Annex II (Noxious Liquid Substances (NLS)) in the scope of the proposed STS regulations. The Sub-Committee, however, noted that this was outside its terms of reference as given by the MEPC, whilst acknowledging that the proposal merited further thought.

15.10 The delegation of the United Kingdom supported the main thrust of document BLG 10/15 and that a correspondence group should be formed. The delegation considered it vital that any amendments to MARPOL Annex I should not only represent best practice, but be consistent with

UNCLOS. Responding to suggestions by some States that the matter be referred to IMO's Legal Committee, the United Kingdom delegation stated that it firmly believed that the Legal Committee was not a dumping ground for legal problems with IMO instruments that fell within the purview of other bodies of the Organization. If legal problems were identified by Member States, then they should bring their experts on international law to the appropriate Committee or Sub-Committee.

15.11 Having concluded the general discussion, the Sub-Committee took a decision on the two action points requested of the Sub-Committee in document BLG 10/15 and agreed to:

.1 develop draft amendments to the revised MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea; and

.2 establish a correspondence group to further develop the draft amendments over the intersessional period which should report to BLG 11.

Implementation of the proposed amendments in certain cases

15.12 The Sub-Committee decided to examine more closely several issues, as detailed hereunder in paragraphs 15.13 to 15.16, in connection with the scope of the proposed amendments, with the aim of providing the correspondence group with clear guidance on those matters where a common position could be found.

Special Areas and Particularly Sensitive Sea Areas (PSSAs)

15.13 In considering the possibility of establishing a total ban for STS oil transfer operations within Special Areas or PSSAs, the Sub-Committee decided that this was not a suitable proposition and that any intended prohibition could rather be dealt with on a case-by-case basis, for instance as an Associated Protective Measure in a PSSA. The Sub-Committee agreed to task the correspondence group with exploring if additional generic requirements were necessary for Special Areas and PSSAs.

Bunkering operations

15.14 Most delegations felt that STS oil fuel operations should be covered by the proposed regulations. One delegation, however, mentioned that only heavy grade oil bunkering operations should be included in the scope of the regulations. The Sub-Committee agreed to refer this issue to the correspondence group.

FPSOs and FSUs

15.15 The Sub-Committee could not reach a conclusive decision on whether the proposed new regulations should apply to FPSOs and FSUs and agreed to task the correspondence group to further explore the feasibility and convenience of this inclusion by developing the pros and cons in either case for the Sub-Committee to decide at a later stage (see also paragraph 15.9.8 above).

High seas

15.16 The Sub-Committee agreed that the proposed regulations should apply not only in the territorial sea, but also in the Exclusive Economic Zone or in the high seas, as appropriate, taking into account the provisions of UNCLOS. The Sub-Committee recognized that within the

territorial waters a coastal State has the prerogative of imposing more stringent regulations (see also paragraph 15.9.3).

Establishment of the correspondence group

15.17 Having considered the outcome of an informal group (BLG 10/WP.9) which was instructed to draft terms of reference for the intersessional correspondence group, taking into account documents BLG 10/15/1 submitted by OCIMF and ICS, BLG 10/5/2 submitted by Australia and BLG 10/15/3 submitted by Denmark as well as the comments and decisions made in plenary, as reflected in paragraphs 15.9 to 15.16 above, the Sub-Committee established the correspondence group, under the co-ordination of Spain*, with the following terms of reference:

.1 develop a draft new chapter 8 of the revised MARPOL Annex I, containing regulations for the prevention of marine pollution during oil transfer operations between ships at sea, on the basis of the annex to document BLG 10/15, in particular to:

.1 explore if additional generic requirements are necessary for special areas and PSSAs, taking into account the Sub-Committee's decision that a total ban is considered inappropriate;

.2 consider whether different requirements should apply to STS bunkering operations; and

.3 further consider the advantages and disadvantages of including FPSOs and FSUs in the scope of the new chapter 8; and

.2 submit a report to BLG 11.

Other issues for consideration by the Marine Environment Protection Committee

15.18 The Sub-Committee agreed to invite MEPC 55 to consider whether STS transfer at sea of Noxious Liquid Substances under MARPOL Annex II should also be subject to regulation, and decide as appropriate (see also paragraph 15.9.9).

15.19 The Sub-Committee further agreed to invite MEPC 55 to consider whether the proposed amendments should be referred to the Legal Committee for consideration with regard to ensuring consistency with international law, as was the view of several delegations (see also paragraph 15.9.5).

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16 WORK PROGRAMME AND AGENDA FOR BLG 11

Terms of reference for the Sub-Committee

16.1 The Sub-Committee noted its terms of reference as approved by MSC 80 and MEPC 53 (BLG 10/16), set out in annex 14, keeping in mind the instruction of the Committees that the sub-committees should periodically review their terms of reference to ensure that they accurately reflect the work being carried out.

Work programme of the Sub-Committee and provisional agenda for BLG 11

16.2 Taking into account the progress made during the session and the provisions of the agenda management procedure, the Sub-Committee reviewed its work programme and the draft agenda for the next session (BLG 10/WP.6) and prepared a draft revised work programme and draft provisional agenda for BLG 11. While doing so, the Sub-Committee agreed to invite the MSC and the MEPC, as appropriate, to:

.1 delete the following work programme items, as work on them has been completed:

.1.1 item H.2 Requirements for protection of personnel involved in the transport of cargoes containing toxic substances in all types of tankers;

.1.2 item H.4 Amendments to resolution MEPC.2(VI); and

.1.3 item H.5 Development of standards regarding rate of discharge for sewage;

.2 extend the target completion date of item H.7 – Development of guidelines for uniform implementation of the 2004 BWM Convention, to 2007;

.3 replace the number of sessions needed for completion with a target completion date of 2008 for item H.3 – Oil tagging systems, since it has been selected for inclusion in the provisional agenda for BLG 11; and

.4 renumber the work programme items accordingly.

16.3 With regard to work programme item H.3 – Oil tagging systems, the Sub-Committee recalled its decision at BLG 8, when the item had been on the agenda but no documents had been submitted, that it should deal with the issue at a future session and retained it in the work programme. The Sub-Committee, therefore, included the item in the provisional agenda for BLG 11 in the understanding that, if again, no documents would be submitted on the issue, then the item should be deleted from the work programme.

16.4 The MSC and the MEPC were invited to approve the draft revised work programme and the draft provisional agenda for BLG 11, as set out in annex 15.

Arrangements for the next session

16.5 The Sub-Committee agreed to establish at its next session working/drafting groups on the following subjects:

.1 evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments;

.2 development of guidelines for uniform implementation of the 2004 BWM Convention;

.3 review of MARPOL Annex VI and the NOx Technical Code;

.4 development of provisions for gas-fuelled ships; and

.5 amendments to MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea,

and agreed that information on the arrangements for BLG 11, concerning the allocation of working and drafting groups, would be issued by the Chairman after MEPC 55.

16.6 The Sub-Committee established correspondence groups on the following subjects, due to report to BLG 11:

.1 development of provisions for gas-fuelled ships;

.2 amendments to MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea;

.3 amendments to the regulations under MARPOL Annex VI; and

.4 amendments to the NOx Technical Code, VOCs and issues related to the implementation of MARPOL Annex VI.

Dates of the next session

16.6 The Sub-Committee noted that its eleventh session had been tentatively scheduled to take place from 16 to 20 April 2007 in London, at a venue to be announced in due course.

Intersessional meetings

16.7 The Sub-Committee noted that MEPC 54 had approved, subject to MSC 81's concurrent decision, the request to hold an intersessional meeting of the ESPH Working Group in 2006 to report directly to MEPC 55. In this context, the Sub-Committee recalled that, under agenda item 3, it had invited the MSC and the MEPC to approve the holding of the intersessional meeting of the ESPH Working Group in 2007.

17 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2007

17.1 The Sub-Committee, in accordance with the Rules of Procedure of the Maritime Safety Committee and the Marine Environment Protection Committee, unanimously re-elected Mr. Z. Alam (Singapore) as Chairman and Mr. S. Oftedal (Norway) as Vice-Chairman, both for 2007.

18 ANY OTHER BUSINESS

Recommendations on the safe transport of dangerous cargoes and related activities in port areas (MSC/Circ.675)

18.1 The Sub-Committee recalled that DSC 9 had noted that some aspects of the Recommendations on the safe transport of dangerous cargoes and related activities in port areas address marine pollutants, environmental issues and other matters falling under the scope of MARPOL 73/78. As these aspects are within the purview of the MEPC, DSC 9 did not examine either the marine pollution aspects of the Recommendations nor annex 5 of the Recommendations on bunkering precautions, including the Bunkering checklist (see also paragraphs 18.4 and 18.5).

18.2 The Sub-Committee also recalled that MSC 79 had invited the MEPC to consider those aspects of the revision of the Recommendations on the safe transport of dangerous cargoes and related activities in port areas (MSC/Circ.675) (MEPC 53/11/1/Corr.1, paragraph 1) which fall under its purview and that, in the light of the request of DSC 9 to extend the target completion date of the relevant work programme item to 2006, MEPC 53 had agreed to consider the matter at MEPC 54.

18.3 The Sub-Committee finally recalled that DSC 10 had agreed that further work to revise the Recommendations should continue intersessionally, for finalization at DSC 11, and had accepted the kind offer of ICHCA International and IAPH to undertake the editorial revision of the circular.

18.4 The Sub-Committee noted that MEPC 54 had instructed BLG 10 to review the issues concerning annex 5 to the Recommendations relating to bunkering precautions; consider referencing the appropriate provisions of the OPRC/HNS Protocol to bring these to the attention of port authorities; and to report back to DSC 11 with a view to final approval of the Recommendations by MEPC 55 and MSC 82.

18.5 Following consideration, the Sub-Committee proposed the following modifications to the revised Recommendations set out in annex 7 to document DSC 9/15:

.1 in section 9.1, various references to other instruments/documents need to be verified;

.2 in paragraph 9.2.2.2, the Note should be deleted;

.3 provisions in section 9.4.6 need to be verified against the ISGOTT and OCIMF checklist;

.4 in Annex 1 on Advance notification, in paragraphs 1.2, 2.1 and 3.2, the square brackets should be deleted and the word “liquid” retained;

.5 in Annex 5 on Bunkering precautions, including bunkering checklists, a reference to resolution MSC.150(77) should be included;

.6 under the heading "Relevant IMO requirements", a reference to the OPRC/HNS Protocol should be inserted; and

.7 in the Appendix, the selected bibliography list of internationally recognized Codes and Guides relevant to the transport and handling of dangerous cargoes in port areas (Organizations concerned to provide the information to the Secretariat before DSC 11) should be updated,

and instructed the Secretariat to inform the DSC Sub-Committee accordingly.

Expression of appreciation

18.6 The Sub-Committee expressed its appreciation to Captain Ian Finley (Panama), who had recently relinquished his duties, for his invaluable contribution to its work and wished him success in any new endeavours.

Expression of condolence

18.7 The Sub-Committee learnt with sadness of the death of its former Chairman, Mr. Martin Böckenhauer (Germany), who brought an immense depth of technical knowledge to IMO. He was especially remembered for chairing the BCH and then the BLG Sub-Committee with a firm and fair hand through sensitive and complex issues, such as, most recently, the revision of Annex II of MARPOL. He was fully committed to the causes of maritime safety and environmental protection and made a major contribution over many years.

19 ACTION REQUESTED OF THE COMMITTEES

19.1 The Maritime Safety Committee is invited to:

.1 note that the Sub-Committee reconsidered its previous decision to issue a loose-leaf publication of the amended IBC Code and agreed that the next edition of the Code should be published as a perfect-bound book, with the contents of chapters 17, 18 and 19 additionally included in electronic format on a CD-ROM (paragraph 3.3.20);

.2 note the proposed timescale for the next set of amendments to the IBC Code and the work done on the draft amendments to chapters 17, 18 and 19 of the Code, with a view to approval of the draft amendments at MSC 81 in principle, subject to concurrent decision by MEPC 55, for subsequent adoption at MSC 82 and MEPC 56 (paragraphs 3.3.21 and 3.16.2);

.3 note that the Sub-Committee agreed to revise MSC/Circ.1095 in order to reflect concerns regarding benzene in pyrolysis gasoline (paragraph 3.16.4);

.4 endorse, subject to MEPC concurrent decision, the issuance of BLG/Circ.17 on Use of the correct product name in the shipping document for bulk liquid cargoes (paragraph 3.16.7);

.5 endorse, subject to MEPC concurrent decision, the issuance of BLG/Circ.18 on Example of an optional shipping document for the purposes of MARPOL Annex II and the IBC Code (paragraph 3.16.8);

.6 endorse, subject to MEPC concurrent decision, the issuance of BLG/Circ.19 on Products which have been classified or re-classified since the adoption of the amended IBC Code in 2004 (paragraph 3.16.9);

.7 approve the draft new SOLAS regulation VI/5-1, with a view to subsequent adoption (paragraph 5.6 and annex 5);

.8 approve the draft MSC circular on Voluntary structural guidelines for new ships carrying liquids in bulk containing benzene (paragraph 5.9 and annex 6);

.9 note the progress on the development of provisions for gas-fuelled ships and, in view of the fact that the main expertise on the matter as a whole is available in the BLG Sub-Committee, to assign the role of a co-ordinator for the item to the BLG Sub-Committee (paragraph 5.16);

.10 approve the draft MSC circular on Interpretation to SOLAS regulation II-2/4.5.1.1 (paragraph 9.2 and annex 9);

.11 approve, subject to MEPC's concurrent decision, the proposed revised work programme of the Sub-Committee and the provisional agenda for BLG 11 (paragraphs 16.2 and 16.3 and annex 15); and

.12 approve the holding of an intersessional meeting of the ESPH Working Group in 2007 (paragraph 16.7);

.13 approve the report in general.

19.2 The Marine Environment Protection Committee is invited to:

.1 note that the Sub-Committee reconsidered its previous decision to issue a loose-leaf publication of the amended IBC Code and agreed that the next edition of the Code be published as a perfect-bound book, with the contents of chapters 17, 18 and 19 additionally included in electronic format on a CD-ROM (paragraph 3.3.20);

.2 note the proposed timescale for the next set of amendments to the IBC Code and the work done on the draft amendments to chapters 17, 18 and 19 of the IBC Code, and to approve the draft amendments, subject to concurrent decision by MSC 81, for subsequent adoption at MSC 82 and MEPC 56 (paragraphs 3.3.21 and 3.16.2);

.3 endorse, subject to MSC concurrent decision, the issuance of BLG/Circ.17 on Use of the correct product name in the shipping document for bulk liquid cargoes (paragraph 3.16.7);

.4 endorse, subject to MSC concurrent decision, the issuance of BLG/Circ.18 on Example of an optional shipping document for the purposes of MARPOL Annex II and the IBC Code (paragraph 3.16.8);

.5 endorse, subject to MSC concurrent decision, the issuance of BLG/Circ.19 on Products which have been classified or re-classified since the adoption of the amended IBC Code in 2004 (paragraph 3.16.9);

.6 approve the draft amendments to the Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973 (resolution MEPC.100(48)) with a view to adoption at MEPC 56 (paragraph 3.16.10 and annex 2);

.7 consider, view a view to adoption by an MEPC resolution, the draft Guidelines on design and construction to facilitate sediment control on ships (G12) as contained in document BLG 9/WP.2, annex 6 (paragraph 4.16.1);

.8 consider with a view to adoption by an MEPC resolution, the draft Guidelines for ballast water exchange design and construction standards (G11) as contained in document MEPC 53/WP.1, annex 1 (paragraph 4.16.2);

.9 note the need for a 'guidance document' on arrangements for responding to emergency situations and instruct the Sub-Committee to develop such a document at BLG 11 (paragraph 4.16.3);

.10 consider, with a view to adoption by an MEPC resolution, the draft Guidelines on designation of areas for ballast water exchange (G14) (paragraph 4.16.5 and annex 4);

.11 consider, with a view to adoption by an MEPC resolution, the Revised Guidelines on implementation of effluent standards and performance tests for sewage treatment plants (paragraph 7.4 and annex 7);

.12 approve the standard rate of discharge and the swept volume definition for the discharge of untreated and undiluted sewage from holding tanks that is not comminuted or disinfected (paragraph 8.6.1), which should appear as a footnote to regulation 11.1.1 of the revised MARPOL Annex IV in the publication of the consolidated edition of MARPOL 73/78;

.13 approve the draft amendment to regulation 11 of the revised MARPOL Annex IV to include untreated sewage from spaces containing living animals, with a view to circulation for subsequent adoption (paragraph 8.6.4 and annex 8);

.14 endorse the terms of reference for the Intersessional Meeting of the Working Group on Air Pollution (paragraph 14.21.6 and annex 10);

.15 approve the Unified interpretations concerning implementation of MARPOL Annex VI and the NOx Technical Code and related implementation issues (paragraph 14.21.10 and annex 13);

.16 consider, and decide as appropriate, whether Noxious Liquid Substances (NLS) under MARPOL Annex II should be subject to regulation to be developed in respect of STS transfer at sea (paragraph 15.18);

.17 consider whether the proposed MARPOL amendments for the prevention of marine pollution during oil transfer operations between ships at sea should be referred to the Legal Committee for consideration with regard to ensuring consistency with international law (paragraph 15.19);

.18 approve, subject to MSC's concurrent decision, the proposed revised work programme of the Sub-Committee and the provisional agenda for BLG 11 (paragraphs 16.2 and 16.3 and annex 15); and

.19 approve the holding of an intersessional meeting of the ESPH Working Group in 2007 (paragraph 16.7);

.20 approve the report in general.

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ANNEX 1

POLLUTION CATEGORIES, SHIP TYPE AND CARRIAGE REQUIREMENTS FOR THREE NEW PRODUCTS UNDER THE AMENDED IBC CODE

a	c	d	e	f	g	h	i Electrical equipment			j	k	l	n	o
							i'	i"	i"'					
Product name	Pollution Category	Hazards	Ship Type	Tank type	Tank vents	Tank environmental control	Class	Group	Flashpoint > 60ºC	Gauging	Vapour detection	Fire protection	Personnel safety equipment for emergenices	Special requirements
Alkylbenzene mixtures (containing at least 50% of toluene)	Y	S/P	3	2G	Cont	No	T1	IIA	No	C	F-T	ABC	No	15.12, 15.17, 15.19.6
Distilled Resin Oil	Y	S/P	2	2G	Cont	No	T1	IIA	No	C	F-T	ABC	No	15.12, 15.17, 15.19.6
Oxygenated aliphatic hydrocarbon mixture	Z	S/P	3	2G	Open	No	-	-	Yes	O	No	ABC	No	

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ANNEX 2

DRAFT AMENDMENTS TO THE REVISED LIST OF SUBSTANCES ANNEXED TO THE PROTOCOL RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF POLLUTION BY SUBSTANCES OTHER THAN OIL, 1973 (RESOLUTION MEPC.100(48))

In the List of Substances referred to in paragraph 2 (a) of Article 1 of the Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973, set out in the annex to resolution MEPC.100(48), paragraph 2 is replaced by the following:

"2 **Noxious Liquid Substances**, as defined in Annex II to MARPOL 73/78, as amended, when carried in bulk, and identified:

.1 as Pollution Category X or Y, in:

.1 Chapter 17 of the International Bulk Chemical Code (IBC Code); or

.2 Lists 1 to 4 of MEPC.2/Circulars, issued annually in December; or

.2 in the composite list of GESAMP Hazard Profiles, issued periodically as BLG circulars, with either:

.1 a '2' in column B1 and '2' in column E3; or

.2 '3' in column E3;"

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ANNEX 3

WORK PROGRAMME OF THE INTERSESSIONAL MEETING OF THE ESPH WORKING GROUP (4 to 8 September 2006)

1	Evaluation of new products	Ongoing
2	Evaluation of Cleaning Additives	Ongoing
3	Review of MEPC.2/Circular – Provisional classification of liquid substances transported in bulk and other related matters	Ongoing
4	Remaining issues from GESAMP/EHS 42 and outcome of GESAMP/EHS 43	Ongoing
5	Consolidation of the list of synonyms for vegetable oils	2006
6	Follow-up action on chapter 19 of the amended IBC Code consequential to the changes in Chapters 17 and 18	2006
7	Consideration of the administrative procedures concerning submission of data to GESAMP/EHS and ESPH	2006
8	Amend the reporting form on cleaning additives (MEPC/Circ.363) as a consequence of the revision of Annex II to MARPOL 73/78	2006
9	Any other business	

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ANNEX 4

DRAFT GUIDELINES ON DESIGNATION OF AREAS FOR BALLAST WATER EXCHANGE (G14)

1 PURPOSE

1.1 The purpose of these Guidelines is to provide guidance to port States for the identification, assessment and designation of sea areas where ships may conduct ballast water exchange in accordance with regulation B-4.2 of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (the Convention).

2 INTRODUCTION

2.1 Regulation B-4.2 of the Convention allows port States to designate areas, in consultation with adjacent or other States, as appropriate, where ships may conduct ballast water exchange.

2.2 These Guidelines provide generic guidance to promote uniform application of regulation B-4.2 in designating areas for ballast water exchange to minimize the risk of introduction of harmful aquatic organisms and pathogens. Party or Parties designating an area according to regulation B-4.2 should endeavour not to impair or damage their environment, human health, property or resources or those of other States (under Article 2.6 of the Convention).

3 APPLICATION

3.1 These Guidelines are intended for port States considering and intending to designate areas for ballast water exchange in accordance with regulation B-4.2. Regulation B-4.2 states that "in sea areas where the distance from the nearest land or the depth does not meet the parameters described in paragraph 1.1 or 1.2, the port State may designate areas, in consultation with adjacent or other States, as appropriate, where a ship may conduct Ballast Water exchange".

4 DEFINITIONS

4.1 For the purposes of these Guidelines, the definitions in the Convention apply.

5 PROCESS FOR THE DESIGNATION OF SEA AREAS FOR BALLAST WATER EXCHANGE

5.1 There are three integral steps to designating an area as a ballast water exchange area: identification, assessment and designation. The Guidelines provide criteria to address and consider for each of these steps (see sections 7, 8 and 9), however these criteria are not intended to be exhaustive.

5.2 A port State considering designating ballast water exchange areas shall do this in accordance with its rights and obligations under international law.

6 CONSULTATION AND REGIONAL CO-OPERATION

6.1 The port State should consult with adjacent or other States, as appropriate, when identifying, assessing and designating potential ballast water exchange areas. It must be

recognized that some States may not be a Party to the Convention however this should not negate the consultation process. The port State initiating the consultation process should exchange information and should take into account all views and comments of the adjacent and other States as far as practicable. States should endeavour to resolve any identified concerns.

6.2 If multiple Parties wish to jointly designate ballast water exchange areas, they could do so under Article 13.3 of the Convention through a regional agreement.

7 IDENTIFICATION OF POTENTIAL SEA AREAS FOR BALLAST WATER EXCHANGE

7.1 Depending upon the nature of the seas surrounding the port State, it may be considered appropriate for single or multiple ballast water exchange areas to be identified.

7.2 The following considerations should be taken into account when identifying potential sea area(s) for undertaking ballast water exchange:

Legal aspects

7.2.1 Any national or international legal requirements or obligations should be considered in identifying potential sea areas for designation under regulation B-4.2.

7.2.2 Sea areas beyond the jurisdiction of a port State may provide the most practical and appropriate area for ballast water exchange. A Party should not designate ballast water exchange areas in waters under the jurisdiction of another State, without its agreement and consultation with adjacent and other States. Consultation should be initiated as soon as possible in the process to facilitate exchange of information and agreement for the designation of the ballast water exchange area (see section 6).

Important resources and protected areas

7.2.3 In the designation of ballast water exchange area, Parties should consider and avoid, to the extent practicable, potential adverse impact in aquatic areas protected under national or international law, as well as other important aquatic resources including those of economic and ecological importance.

Navigational constraints

7.2.4 Any designation of ballast water exchange areas should take into account navigation impacts, including the desirability of minimizing delays, as appropriate, taking into consideration the following:

.1 the area should be on existing routes if possible,

.2 if the area cannot be on existing routes, it should be as close as possible to them.

7.2.5 Constraints to safe navigation must be considered when selecting the location and size of the ballast water exchange area. Such considerations should include, but are not limited to:

.1 increased shipping traffic congestion;

.2 proximity to other vessel traffic (small craft, offshore platforms etc.);

.3 adequate aids to navigation;

.4 security of the area; and

.5 shipping lanes/ship routeing systems.

8 ASSESSMENT OF IDENTIFIED SEA AREAS

8.1 Risk assessment is a logical process for objectively assigning the likelihood and consequences of specific events. Risk assessments can be qualitative or quantitative, and can be a valuable decision aid if completed in a systematic and rigorous manner.

8.1.1 The following key principles define the nature and performance of risk assessment:

.1 **Effectiveness –** That risk assessments accurately measure the risks to the extent necessary to achieve an appropriate level of protection.

.2 **Transparency –** That the reasoning and evidence supporting the actions recommended by risk assessments, and areas of uncertainty (and their possible consequences to those recommendations), are clearly documented and made available to decision-makers.

.3 **Consistency –** That risk assessments achieve a uniform high level of performance, using a common process and methodology.

.4 **Comprehensiveness –** That the full range of values, including economic, environmental, social and cultural, are considered when assessing risks and making recommendations.

.5 **Risk Management –** Low risk scenarios may exist, but zero risk is not obtainable, and as such risk should be managed by determining the acceptable level of risk in each instance.

.6 **Precautionary –** That risk assessments incorporate a level of precaution when making assumptions, and making recommendations, to account for uncertainty, unreliability, and inadequacy of information. The absence of, or uncertainty in, any information should therefore be considered an indicator of potential risk.

.7 **Science based –** That risk assessments are based on the best available information that has been collected and analysed using scientific methods.

.8 **Continuous improvement –** Any risk model should be periodically reviewed and updated to account for improved understanding.

8.2 The identified ballast water exchange area(s) should be assessed in order to ensure that its designation will minimize any threat of harm to the environment, human health, property or resources taking into account but not limited to the following criteria:

8.2.1 **Oceanographic** (e.g., currents, depths)

- Currents, upwellings or eddies should be identified and considered in the evaluation process. Sea areas where currents disperse discharged ballast water away from land should be selected where possible.

- Areas where tidal flushing is poor or where a tidal stream is known to be turbid, should be avoided where possible.

- The maximum water depth available should be selected where possible.

8.2.2 **Physico-chemical** (e.g., salinity, nutrients, dissolved oxygen, chlorophyll 'a')

- High nutrient areas should be avoided where possible.

8.2.3 **Biological** (e.g., presence of Harmful Aquatic Organisms and Pathogens, including cysts; organisms density)

- Areas known to contain outbreaks, infestations, or populations of Harmful Aquatic Organisms and Pathogens (e.g., harmful algal blooms) which are likely to be taken up in Ballast Water, should be identified and avoided where possible.

8.2.4 **Environmental** (e.g., pollution from human activities)

- Sea area/s that may be impacted by pollution from human activities (e.g., areas nearby sewage outfalls) where there may be increased nutrients or where there may be human health issues, should be avoided where possible.

- Sensitive aquatic areas should be avoided to the extent practicable.

8.2.5 **Important resources** (e.g., fisheries areas, aquaculture farms)

- Location of important resources, such as key fisheries areas and aquaculture farms should be avoided.

8.2.6 **Ballast water operations** (e.g., quantities, source, frequency)

- A foreseen estimation of the quantities, sources and frequencies of ballast water discharges from vessels that will use the designated sea area should be considered in the assessment of such area.

8.3 An assessment of the most appropriate size of the designated ballast water exchange area needs to take into account the above considerations.

9 DESIGNATION OF SEA AREAS FOR BALLAST WATER EXCHANGE

9.1 The location and size that provides the least risk to the aquatic environment, human health, property or resources should be selected for designation. The spatial limits of the ballast water exchange area/s should be clearly defined and shall be in accordance with international

law. It may also be possible for the designation of a ballast water exchange area to apply over specified timeframes, and these should be clearly defined.

9.2 A baseline evaluation should be conducted to aid future monitoring and review. The process of identification and assessment may provide sufficient information for the baseline.

10 COMMUNICATION

10.1 A Party or Parties intending to designate areas for ballast water exchange under regulation B-4.2 should communicate this intention to the Organization prior to the implementation of the designated ballast water exchange area. Such communication should include:

.1 The precise geographical co-ordinates, depth limit and/or distance from nearest land that defines the designated ballast water exchange area.

.2 Other information that may be relevant to facilitate ships' identification of the designated ballast water exchange area, for example navigation aids.

.3 Details of the characteristics of the designated ballast water exchange area that may be relevant to assist ships plan their voyage, including: use of area by other traffic, current and tidal flow, wind and swell conditions, seasonal events (cyclones, typhoons, ice, etc.).

10.2 The Organization shall circulate information regarding designated ballast water exchange areas to the Members of the Organization.

10.3 Port States should provide adequate advice to ships on the location and terms of use of the designated ballast water exchange area. Such advice may include exchanging as many tanks as possible under regulation B-4.1, as far as practicable taking into account regulation B-4.3, before utilizing the designated ballast water exchange area.

11 MONITORING AND REVIEW

11.1 The use of the designated ballast water exchange area and any impacts on the aquatic environment, human health, property or resources of the port State or those of other States should be monitored and reviewed on a regular basis.

11.2 One reason for monitoring may be to document the occurrence of harmful aquatic organisms in such areas which may be introduced by ballast water exchange. In case harmful aquatic organisms are found to be introduced, the designated ballast water exchange area may be closed to avoid promoting the spread of such newly occurring species to other regions.

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ANNEX 5

DRAFT NEW SOLAS REGULATION VI/5-1

CHAPTER VI
CARRIAGE OF CARGOES

The following new regulation 5-1 is added after existing regulation 5:

"Regulation 5-1
Material safety data sheets

Ships carrying MARPOL Annex I cargoes, as defined in Appendix I to Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, and marine fuel oils shall be provided with a material safety data sheet prior to the loading of such cargoes based on the recommendations developed by the Organization.[*]"

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[*] Refer to the Recommendation for material safety data sheets (MSDS) for MARPOL Annex I cargoes and marine fuel oils, adopted by resolution MSC.150(77).

ANNEX 6

DRAFT MSC CIRCULAR

VOLUNTARY STRUCTURAL GUIDELINES FOR NEW SHIPS CARRYING LIQUIDS IN BULK CONTAINING BENZENE

1 The Maritime Safety Committee, at its seventy-seventh session (28 May to 6 June 2003), noting that the diseases caused by the exposure to vapours emanating from benzene were still a source of great concern, approved Revised minimum safety standards for ships carrying liquids in bulk containing benzene, as set out in the annex to MSC/Circ.1095.

2 Member Governments were invited to apply the Revised minimum safety standards for ships carrying liquids in bulk containing benzene, including precautions to be taken by the crew in connection with loading and gas-freeing operations appended thereto, as soon as possible.

3 The Committee, at its [eighty-second session (29 November to 8 December 2006], desiring to protect the health of seafarers, recognized that whilst the aforementioned recommendations were aimed at the shipping community, other measures of a structural nature were needed, and approved the Voluntary structural guidelines for new ships carrying liquids in bulk containing benzene, set out in the annex.

4 Member Governments are invited to bring the Voluntary structural guidelines to the attention of shipowners, ship builders, designers and other parties concerned.

ANNEX

VOLUNTARY STRUCTURAL GUIDELINES FOR NEW SHIPS CARRYING LIQUIDS IN BULK CONTAINING BENZENE

1 GENERAL

The aim of these Guidelines is to introduce some technical improvements for further consideration in the design and equipment of tankers to reduce the exposure of seafarers to benzene vapours, be it on deck, in the engine-room or in the accommodation, in particular during loading and gas-freeing. Further use of closed cycle loading and unloading is also encouraged for cargoes other than those required by the IBC Code. Other technical solutions such as vapour recovery or vapour filtering that may be developed in the future should also be taken into account.

2 VENTILATION IN THE ACCOMMODATION

In accordance with standard operational procedures, ventilation should be closed down or shut down during loading and gas-freeing, all internal and external doors should be kept closed and passage through doors to open deck should be restricted to a minimum. Nevertheless, experience has shown that it has proven impossible to keep the measured vapour concentrations below acceptable levels. Some restricted ventilation will also have to be maintained in certain areas such as the galley and bathrooms.

2.1 Air intake

Consideration should be given to the location of the air intakes to minimize the entry of harmful vapours. Traditionally, these are normally located on the boat deck connected to the engine-room casing or in the exhaust stack. Bearing in mind that vapours are normally heavier than air, other higher locations may be considered to avoid the vapour envelope around the tanker.

2.2 Air filtering and monitoring

A chemical or mechanical filter where the incoming air is continuously monitored for its concentration of harmful vapours should be provided.

3 VENTILATION IN THE ENGINE-ROOM

3.1 Special air ducts

Combustion engines require large volumes of atmospheric air. Therefore, most engine-rooms are provided with overpressure in relation to the accommodation. To reduce the overpressure and thereby the risk of harmful vapours entering the accommodation, special air-ducts could be fitted to the air intake for combustion engines and boilers.

3.2 Other ventilation

Apart from the air intakes to the engines, additional ventilation in the engine-room is also required to remove heat and to avoid the risk of explosion. Therefore, the presence of harmful vapours cannot be completely avoided. The presence of personnel in the engine-room during loading and gas-freeing should therefore be kept to a minimum. In the engine control room and engine workshops the same ventilation principle as in the accommodation should be applied.

4 AIRLOCKS

Airlocks should be provided to allow crew members to pass from contaminated areas (such as the engine-room and open deck) to the accommodation through a double set of doors where one must be closed before the next can be opened. The space between these doors should be supplied with filtered air with a slight overpressure. One airlock between the open deck and accommodation and one between the engine-room and accommodation is considered acceptable.

5 WASHING AND CHANGING FACILITIES

Washing and changing facilities and toilets should be located with a possibility for the crew to enter directly from the cargo area without passing through any other part of the accommodation. Preferably it should be arranged in such a manner that passage to the accommodation can only take place from the changing room for soiled work clothes through the washing facilities and through the changing room for clean clothes. Lockers and washing machines for soiled working clothes should as well be located separate from the accommodation.

6 WORK ON DECK

6.1 Spill trays

In new tankers, the design of spill trays should be such that the surface of any liquid in the spill tray is reduced to the minimum extent possible and thus the evaporation minimized. One way of achieving this could be by designing spill trays with sloping sides. Other constructions with similar effect may also be acceptable. Drainage facilities for the spill trays and the disposal of their content should be installed (e.g., slop tanks and disposal arrangements).

6.2 Purging air capability

There should be adequate purging air capacity to ensure efficient and complete purging of all pipes and hoses used for cargo handling to the terminal after unloading. Whether compressed air or inert gas should be used for purging purposes depends on the carriage and unloading requirements of the cargo.

7 CARGO MEASUREMENTS AND SAMPLING

To allow all cargo related measurements, including ullage, temperature measurements and sampling to be carried out in a closed mode, permanently fitted equipment should be installed.

8 GAS-FREEING

Gas-freeing should be undertaken using permanently fixed blowers with a piping system, which fits closely to the cargo tank hatches. Each blower should have sufficient capacity and pressure to ensure that the expelled vapours are let with sufficient velocity well clear of the ship through adequate riser arrangements.

9 TANK WASHING AND STRIPPING

Tank washing machines should be permanently mounted in the cargo tanks. Efficient stripping arrangements to drain the suction wells as much as possible should be provided.

10 CONTROLLED TANK VENTING SYSTEM

Whenever a vapour emission control system is available ashore, vapours displaced from the tank during loading should be returned to that system (vapour return). Ships should therefore be fitted with piping systems suitable for vapour return.

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ANNEX 7

DRAFT RESOLUTION MEPC....(55)

adopted on ….October 2006

REVISED GUIDELINES ON IMPLEMENTATION OF EFFLUENT STANDARDS AND PERFORMANCE TESTS FOR SEWAGE TREATMENT PLANTS

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING resolution MEPC.2(VI) adopted on 3 December 1976 by which the Marine Environment Protection Committee adopted, at its sixth session, the Recommendation on International Effluent Standards and Guidelines for Performance Tests for Sewage Treatment Plants and invited Governments to apply the Effluent Standards and Guidelines for approving sewage treatment plants; to take steps to establish testing programmes in accordance with the Guidelines for Performance Tests; and provide the Organization with a list of sewage treatment plants meeting the standards,

NOTING ALSO resolution MEPC.115(51) adopted on 1 April 2004 by which the Marine Environment Protection Committee adopted, at its fifty-first session, the revised MARPOL Annex IV and which entered into force on 1 August 2005,

NOTING FURTHER the provisions of regulation 9.1.1 of MARPOL Annex IV, in which reference is made to the above-mentioned guidelines,

RECOGNIZING that resolution MEPC.2(VI) should be amended in order that current trends for the protection of the marine environment and developments in the design and effectiveness of commercially available sewage treatment plants be reflected; and the proliferation of differing unilateral more stringent standards that might be imposed worldwide be avoided,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Bulk Liquids and Gases, at its tenth session,

1. ADOPTS the Revised Guidelines on Implementation of Effluent Standards and Performance Tests for Sewage Treatment Plants, the text of which is set out in the annex to this resolution;

2. INVITES Governments to:

(a) implement the Revised Guidelines on Implementation of Effluent Standards and Performance Tests for Sewage Treatment Plants and apply them so that all equipment installed on board on or after [DD/MM/YYYY] meets the Revised Guidelines in so far as is reasonable and practicable; and

(b) provide the Organization with information on experiences gained from their application and, in particular, on successful testing of equipment against the Standards;

3. REQUESTS the Secretariat, on the basis of information received, to maintain and update a list of approved equipment and to circulate it once a year to Governments;

4. FURTHER INVITES Governments to issue an appropriate "Certificate of type approval for Sewage Treatment Plants" as referred to in paragraph 5.4.2 and the annex of the Revised Guidelines and to recognize such certificates issued under the authority of other Governments as having the same validity as certificates issued by them; and

5. SUPERSEDES the Recommendation on International Effluent Standards and Guidelines for Performance Tests for Sewage Treatment Plants contained in resolution MEPC.2(VI).

ANNEX

REVISED GUIDELINES ON IMPLEMENTATION OF EFFLUENT STANDARDS AND PERFORMANCE TESTS FOR SEWAGE TREATMENT PLANTS

TABLE OF CONTENTS

REVISED GUIDELINES ON IMPLEMENTATION OF EFFLUENT STANDARDS AND PERFORMANCE TESTS FOR SEWAGE TREATMENT PLANTS

1 INTRODUCTION

1.1 The Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) adopted resolution MEPC.2(VI) Recommendation on International Effluent Standards and Guidelines for Performance Tests for Sewage Treatment Plants in 1976.

1.2 This document contains the Revised Guidelines on Implementation of Effluent Standards and Performance Tests for Sewage Treatment Plants (Guidelines). These Guidelines are intended to assist Administrations in establishing operational performance testing programmes for sewage treatment plants for the purpose of type approval under regulation 9.1.1 of Annex IV of the Convention.

1.3 These Guidelines apply to sewage treatment plants fitted to ships, the keel of which was laid or which is at a similar stage of construction on or after [DD/MM/YY].

2 DEFINITIONS

Annex IV – the revised Annex IV of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) as amended by resolution MEPC.115(51).

Convention – the International Convention for the Prevention of Pollution from Ships 1973/1978 (MARPOL 73/78).

Geometric mean – the *n*th root of the product of *n* numbers.

Greywater – is drainage from dishwater, shower, laundry, bath and washbasin drains.

Testing onboard – testing carried out on a sewage treatment plant that has been installed upon a ship.

Testing ashore – testing carried out on a sewage treatment plant prior to installation e.g. in the factory.

Thermotolerant coliforms – the group of coliform bacteria which produce gas from lactose in 48 hours at 44.5ºC. These organisms are sometimes referred to as “faecal coliforms”; however, the term “thermotolerant coliforms” is now accepted as more appropriate, since not all of these organisms are of faecal origin.

3 GENERAL

3.1 An approved sewage treatment plant must meet the standards in section 4 and the tests outlined in these Guidelines. It should also be noted that, when ships are operating approved sewage treatment plants, Annex IV also provides that the effluent shall not produce visible floating solids or cause discolouration of the surrounding water.

3.2 It is acknowledged that the performance of sewage treatment plants may vary considerably when the system is tested ashore under simulated shipboard conditions or onboard a ship under actual operating conditions. Where testing ashore demonstrates that a system complies with the standards, but subsequent onboard testing does not meet the standards, the Administration should determine the reason and take it into account when deciding whether to type approve the plant.

3.3 It is recognized that Administrations may wish to modify the specific details outlined in these Guidelines to take account of very large, very small or unique sewage treatment plants.

4 STANDARDS

4.1 For the purpose of regulation 4.1 of Annex IV, a sewage treatment plant should satisfy the following effluent standards when tested for its Certificate of Type Approval by the Administration:

.1 Thermotolerant Coliform Standard

The geometric mean of the thermotolerant coliform count of the samples of effluent taken during the test period should not exceed 100 thermotolerant coliforms/100 ml as determined by membrane filter, multiple tube fermentation or an equivalent analytical procedure.

.2 Total Suspended Solids Standard

(a) The geometric mean of the total suspended solids content of the samples of effluent taken during the test period shall not exceed 35 mg/l.

(b) Where the sewage treatment plant is tested onboard a ship, the geometric mean of the total suspended solids content of the samples of effluent taken during the test period shall not be more than 70 mg/l above the suspended solids content of ambient water used for flushing purposes.

Analysis for total suspended solids should be conducted in accordance with gravimetric methods approved by the Administration.

.3 Biochemical Oxygen Demand and Chemical Oxygen Demand

Administrations should satisfy themselves that the sewage treatment plant is designed to reduce both soluble and insoluble organic substances to meet the requirement that, the geometric mean of 5-day Biochemical Oxygen Demand (BOD_5) of the samples of effluent taken during the test period does not exceed 25 mg/l and the Chemical Oxygen Demand (COD) does not exceed 125 mg/l. Appropriate methods may include COD Manganese and/or COD Chromium.

.4 pH

The pH of the samples of effluent taken during the test period shall be between 6 and 8.5.

.5 Zero or non-detected values

For thermolerant coliforms, zero values should be replaced with a value of 1 thermotolerant coliform/100 ml to allow the calculation of the geometric mean. For total suspended solids, biochemical oxygen demand and chemical oxygen demand, values below the limit of detection should be replaced with one half the limit of detection to allow the calculation of the geometric mean.

4.2 Where the sewage treatment plant has been tested ashore, the initial survey should include installation and commissioning of the sewage treatment plant.

5 TESTING CONSIDERATIONS

5.1 Testing of the operational performance of a sewage treatment plant should be conducted in accordance with the following subparagraphs. Unless otherwise noted, the subparagraphs apply to testing both onboard and ashore.

5.2 Raw sewage quality

5.2.1 Sewage treatment plants tested ashore - the influent should be fresh sewage consisting of faecal matter, urine, toilet paper and flush water to which, for testing purposes primary sewage sludge has been added as necessary to attain a minimum total suspended solids concentration appropriate for the number of persons and hydraulic loading for which the sewage treatment plant will be certified. The testing should take into account the type of system (for example vacuum or gravity toilets) and any water or greywater that may be added for flushing to the sewage before treatment. In any case the influent concentration of total suspended solids should be no less than 500 mg/l.

5.2.2 Sewage treatment plants tested onboard - the influent may consist of the sewage generated under normal operational conditions. In any case the average influent concentration of total suspended solids should be no less than 500 mg/l.

5.3 Duration and timing of test

5.3.1 The duration of the test period should be a minimum of 10 days and should be timed to capture normal operational conditions, taking into account the type of system and the number of persons and hydraulic loading for which the sewage treatment plant will be type approved. The test should commence after steady-state conditions have been reached by the sewage treatment plant under test.

5.4 Loading factors

5.4.1 During the test period the sewage treatment plant should be tested under conditions of minimum, average and maximum volumetric loadings.

.1 For testing ashore, these loadings will be as laid down in the manufacturer's specifications. Figure 1 shows suggested timings for sampling each loading factor.

.2 For testing onboard, minimum loading will represent that generated by the number of persons on the ship when it is alongside in port, and average and maximum loadings will represent those generated by the number of persons on the ship at sea and will take account of meal times and watch rotations.

5.4.2 The Administration should undertake to assess the capability of the sewage treatment plant to produce an effluent in accordance with the standards prescribed by section 4 following minimum, average and maximum volumetric loadings. The range of conditions under which the effluent standards were met should be recorded on the Certificate of Type Approval. The form of the Certificate of Type Approval and appendix is set out in the annex to these Guidelines.

5.5 Sampling methods and frequency

5.5.1 Administrations should ensure that the sewage treatment plant is installed in a manner which facilitates the collection of samples. Sampling should be carried out in a manner and at a frequency which is representative of the effluent quality. Figure 1 provides a suggested frequency for sampling, however, the frequency should take account of the residence time of the influent in the sewage treatment plant. A minimum of 40 effluent samples should be collected to allow a statistical analysis of the testing data (e.g. geometric mean, maximum, minimum, variance).

5.5.2 An influent sample should be taken and analyzed for every effluent sample taken and the results recorded to ensure compliance with section 4. If possible, additional influent and effluent samples should be taken to allow for a margin of error. Samples should be appropriately preserved prior to analysis particularly if there is to be a significant delay between collection and analysis or during times of high ambient temperature.

5.5.3 Any disinfectant residual in samples should be neutralized when the sample is collected to prevent unrealistic bacteria kill or chemical oxidation of organic matter by the disinfectant brought about by artificially extended contact times. Chlorine (if used) concentration and pH should be measured prior to neutralization.

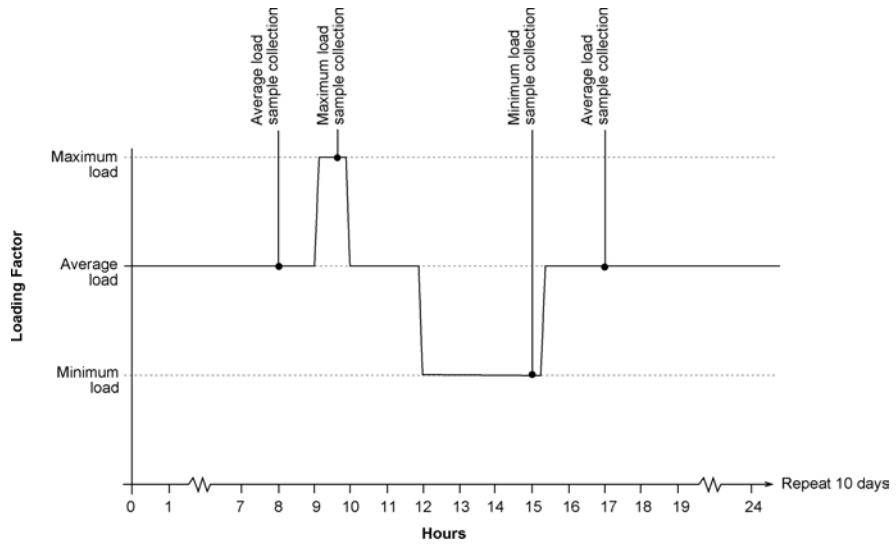

Figure 1: Suggested hydraulic loading factors and sampling frequency for testing sewage treatment plants. May be modified as necessary to take account of characteristics of individual sewage treatment plants

5.6 Analytical testing of effluent

5.6.1 The Administration should give consideration to the recording of other parameters in addition to those required (thermotolerant coliforms, total suspended solids, BOD_5, COD, pH and residual chlorine) with a view to future technological development. Parameters which might be considered include total solids, volatile solids, settlable solids, volatile suspended solids, turbidity, total phosphorus, total organic carbon, total coliforms and faecal streptococci.

5.7 Disinfectant residual

5.7.1 The potential adverse environmental effects of many disinfectant residuals and by-products, such as those associated with the use of chlorine or its compounds, are well recognized. It is, therefore, recommended that Administrations encourage the use of ozone, ultra-violet irradiation or any other disinfectants which minimize adverse environmental effects, whilst pursuing the thermotolerant coliform standard. When chlorine is used as a disinfectant, the Administration should be satisfied that the best technical practice is used to keep the disinfectant residual in the effluent below [0.1][0.5][2.5] mg/l.

5.8 Scaling considerations

5.8.1 Only full-scale marine sewage treatment plants should be accepted for testing purposes. The Administration may certify a range of the manufacturer's equipment sizes employing the same principles and technology, but due consideration must be given to limitations on performance which might arise from scaling up or scaling down. In the case of very large, very small or unique sewage treatment plants, certification may be based on results of prototype tests. Where possible, confirmatory tests should be performed on the final installation of such sewage treatment plants.

5.9 Environmental testing of the sewage treatment plant

5.9.1 The Administration should be satisfied that the sewage treatment plant can operate under conditions of tilt consistent with internationally acceptable shipboard practice.

5.9.2 Tests for certification should be carried out over the range of temperature and salinity specified by the manufacturer, and the Administration should be satisfied that such specifications are adequate for the conditions under which the equipment must operate.

5.9.3 Control and sensor components should be subjected to environmental testing to verify their suitability for marine use. The Test Specifications section in part 3 of the annex to resolution MEPC.107(49) provides guidance in this respect.

5.9.4 Any limitation on the conditions of operation should be recorded on the Certificate.

5.9.5 The Administration should also consider requiring the manufacturer to include in the operating and maintenance manuals, a list of chemicals and materials suitable for use in the operation of the sewage treatment plant.

5.10 Other considerations

5.10.1 The type and model of the sewage treatment plant and the name of the manufacturer should be noted by means of a durable label firmly affixed directly to the sewage treatment plant. This label should include the date of manufacture and any operational or installation limits considered necessary by the manufacturer or the Administration.

5.10.2 Administrations should examine the manufacturer's installation, operating and maintenance manuals for adequacy and completeness. The ship should have on board at all times a manual detailing the operational and maintenance procedures for the sewage treatment plant.

5.10.3 Qualifications of testing facilities should be carefully examined by the Administration as a prerequisite to their participation in the testing programme. Every attempt should be made to assure uniformity among the various facilities.

6 RENEWAL AND ADDITIONAL SURVEYS

6.1 Administrations should endeavour to ensure, when conducting renewal or additional surveys in accordance with regulations 4.1.2 and 4.1.3 of Annex IV, that the sewage treatment plant continues to perform in accordance with the conditions outlined in regulation 4.1.1 of Annex IV.

7 FAMILIARIZATION OF SHIP PERSONNEL IN THE USE OF THE SEWAGE TREATMENT PLANT

7.1 Recognizing that the appropriate regulations relating to familiarization are contained within the Ships Safety Management Systems under the International Safety Management Code, Administrations are reminded that ship staff training should include familiarization in the operation and maintenance of the sewage treatment plant.

ANNEX

FORM OF CERTIFICATE OF TYPE APPROVAL
FOR SEWAGE TREATMENT PLANTS AND APPENDIX

BADGE OR CIPHER

NAME OF ADMINISTRATION

CERTIFICATE OF TYPE APPROVAL
FOR SEWAGE TREATMENT PLANTS

This is to certify that the Sewage Treatment Plant, Type.....……,
having a designed hydraulic loading of ..... cubic metres per day, (m^3/day), an organic loading of ..... kg per day Biochemical Oxygen Demand (BOD) and of the design shown on Drawings Nos. ..
manufactured by .....

has been examined and satisfactorily tested in accordance with the International Maritime Organization resolution MEPC.[ ](55) to meet the operational requirements referred to in regulation 9.1.1 of Annex IV of the International Convention for the Prevention of Pollution from Ships, 1973/78 as modified by resolution MEPC.115(51).

The tests on the sewage treatment plant were carried out
ashore at* .....
onboard at* .....
and completed on .....

The sewage treatment plant was tested and produced an effluent which, on analysis, produces:

(i) a geometric mean of no more than 100 thermotolerant coliforms/100 ml;
(ii) a geometric mean of total suspended solids of 35 mg/l if tested ashore or a geometric mean of total suspended solids of 70 mg/l above the ambient water used for flushing purposes if tested onboard;
(iii) a geometric mean of 5-day Biochemical Oxygen Demand (BOD_5) of no more than 25 mg/l;
(iv) a geometric mean of Chemical Oxygen Demand of no more than 125 mg/l;
(v) pH of the effluent is between 6 and 8.5.

The Administration is satisfied that the sewage treatment plant can operate at angles of inclination of 22.5° in any plane from the normal operating position.

Details of the tests and the results obtained are shown on the Appendix to this Certificate.

A plate or durable label containing data of the manufacturer's name, type and serial numbers, hydraulic loading and date of manufacture is to be fitted on each sewage treatment plant.

A copy of this Certificate shall be carried on board any ship equipped with the above described sewage treatment plant.

Official stamp Signed ....……..…

Administration of ……

Dated this……..……day……..of……..…20..…

* Delete as appropriate.

BADGE OR CIPHER

APPENDIX TO
CERTIFICATE OF TYPE APPROVAL FOR SEWAGE TREATMENT PLANTS

Test results and details of tests conducted on samples from the Sewage Treatment Plant in accordance with resolution MEPC.[...](55):

Sewage Treatment Plant, Type .....
Manufactured by .....
Organization conducting the test .....
Designed hydraulic loading ..... m^3/day
Designed organic loading ..... kg/day BOD

Number of effluent samples tested .....
Number of influent samples tested .....
Raw sewage (influent) quality ..... mg/l Total Suspended Solids
Maximum hydraulic loading ..... m^3/day
Minimum hydraulic loading ..... m^3/day
Average hydraulic loading ..... m^3/day

Geometric Mean of Total
Suspended Solids ..... mg/l
Geometric Mean of the thermotolerant
coliform count ..... coliforms/100 ml
Geometric Mean of BOD_5 ..... mg/l

Type of disinfectant used .....
If Chlorine - residual Chlorine:
Maximum ..... mg/l
Minimum ..... mg/l
Geometric Mean ..... mg/l

Was the sewage treatment plant tested with:
Fresh Water flushing? ..... Yes/No*
Salt Water flushing? ..... Yes/No*
Fresh and Salt Water flushing? ..... Yes/No*
Greywater added? ..... Yes – proportion: /No*

Was the sewage treatment plant tested against the environmental conditions specified in section 5.9 of resolution MEPC.[...](55):
Temperature ..... Yes/No*
Humidity ..... Yes/No*
Inclination ..... Yes/No*
Vibration ..... Yes/No*
Reliability of Electrical and Electronic Equipment ..... Yes/No*

Limitations and the conditions of operation are imposed:
Salinity .....
Temperature .....
Humidity .....
Inclination .....
Vibration .....

Results of other parameters tested .....
Official stamp Signed .....
Administration of …….....Dated this …….. day of …… 20 ....

***

* Delete as appropriate.

ANNEX 8

DRAFT AMENDMENT TO REGULATION 11 OF THE REVISED MARPOL ANNEX IV

Regulation 11.1.1 is replaced by the following:

".1 the ship is discharging comminuted and disinfected sewage using a system approved by the Administration in accordance with regulation 9, paragraph 1.2 of this Annex at a distance of more than 3 nautical miles from the nearest land, or sewage which is not communited or disinfected, at a distance of more that 12 nautical miles from the nearest land, provided that, in any case, the sewage that has been stored in holding tanks, or sewage originating from spaces containing living animals, shall not be discharged instantaneously but at a moderate rate when the ship is *en route* and proceeding at not less than 4 knots; the rate of discharge shall be approved by the Administration based upon standards developed by the Organization; or"

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ANNEX 9

DRAFT MSC CIRCULAR

INTERPRETATION OF SOLAS REGULATION II-2/4.5.1.1

1 The Maritime Safety Committee, at its [eighty-second session (29 November to 8 December 2006)], with a view to ensuring the uniform application of the requirements of SOLAS chapter II-2 containing vague expressions open to diverging interpretations, approved the following interpretation of SOLAS regulation II-2/4.5.1.1, concerning pump-rooms intended solely for ballast transfer or fuel oil transfer, following the recommendations of the Sub-Committee on Bulk Liquids and Gases at its tenth session:

> "Pump-rooms intended solely for ballast transfer need not comply with the requirements of regulation II-2/4.5.10. The requirements of regulation II-2/4.5.10 are only applicable to the pump-rooms where pumps for cargo, such as cargo pumps, stripping pumps, pumps for slop tanks, pumps for COW or similar pumps are provided (see also MSC/Circ.1037). Pump-rooms intended for fuel oil transfer need not comply with the requirements of regulation II-2/4.5.10."

2 Member Governments are invited to use the above interpretation as guidance when applying relevant requirements of SOLAS chapter II-2, and to bring the interpretation to the attention of all parties concerned.

***

ANNEX 10

TERMS OF REFERENCE FOR THE INTERSESSIONAL WORKING GROUP ON AIR POLLUTION

1 The Intersessional Working Group is instructed to:

.1 continue the work from BLG 10 on the revision of MARPOL Annex VI, the NOx Technical Code and related guidelines and consider documents transferred from MEPC 53 and MEPC 54, submitted to BLG 10 and to the Intersessional Working Group meeting, and:

.1.1 examine available and developing techniques for reduction of emission of air pollutants;

.1.2 review the relevant technologies and potential for reduction of NOx, and recommend future limits of NOx emission;

.1.3 review technology and the need for reduction of SOx, justify and recommend future limits of SOx emission;

.1.4 review relevant technology and the need and potential for reduction of VOC, and recommend future control of VOC emission;

.1.5 with a view to controlling emissions of particulate matter (PM), study current emission levels of PM from marine engines, including their size distribution, quantity, and recommend actions to be taken for the reduction of PM from ships. Since reduction of NOx and SOx emission is expected to also reduce PM emission, estimate the level of PM emission reduction through this route;

.1.6 consider reducing NOx and PM limits for existing engines;

.1.7 consider whether Annex VI emission reductions or limitations should be expanded to include diesel engines that use alternative fuels and engine systems/power plants other than diesel engines; and

.1.8 review the texts of Annex VI, NOx Technical Code and related guidelines and recommend necessary amendments;

.2 consider the need for further intersessional work prior to BLG 11, and if appropriate establish correspondence group(s) to undertake such work; and

.3 report the outcome of the meeting and the revision process to BLG 11.

***

ANNEX 11

TERMS OF REFERENCE FOR THE INTERSESSIONAL CORRESPONDENCE GROUP ON AMENDMENTS TO THE REGULATIONS UNDER MARPOL ANNEX VI

The Correspondence Group is instructed to:

.1 Continue the work from BLG 10 with respect to:

.1.1 structure of the revised Annex VI;

.1.2 review the relevant technologies and potential for reduction of NOx, and recommend future limits of NOx emission;

.1.3 review technology and the need for reduction of SOx, justify and recommend future limits of SOx emission;

.1.4 with a view to controlling emissions of particulate matter (PM), study current emission levels of PM from marine engines, including their size distribution, quantity, and recommend actions to be taken for the reduction of PM from ships. Since reduction of NOx and SOx emission is expected to also reduce PM emission, estimate the level of PM emission reduction through this route;

.1.5 consider reducing NOx and PM limits for existing engines; and

.1.6 consider whether Annex VI emission reductions or limitations should be expanded to include diesel engines that use alternative fuels and engine systems/power plants other than diesel engines;

.2 gather and exchange input from the members and present the different options or proposals in a report to the Intersessional Working Group meeting (13 to 17 November 2006); and

.3 submit a report to the IMO Secretariat by Monday, 2 October 2006.

***

ANNEX 12

TERMS OF REFERENCE FOR THE INTERSESSIONAL CORRESPONDENCE GROUP ON AMENDMENTS TO THE NOx TECHNICAL CODE, VOCs, AND ISSUES RELATED TO IMPROVED IMPLEMENTATION OF MARPOL ANNEX VI

The Correspondence Group is instructed to:

.1 in accordance with the general terms of reference adopted by MEPC 53:

.1.1 review the NOx Technical Code with respect to potential changes that may be needed;

.1.2 review relevant technology and the need and potential for reduction of Volatile Organic Compounds (VOC) and recommend future control of VOC emission, using documents MEPC 53/4/12 (Norway) and BLG 10/14/2 (Norway); and

.1.3 consider potential changes related to improved implementation of Annex VI, including fuel oil quality; and

.2 submit a report to the IMO Secretariat by Monday, 2 October 2006.

***

ANNEX 13

DRAFT UNIFIED INTERPRETATIONS TO MARPOL ANNEX VI AND THE NOx TECHNICAL CODE AND RELATED IMPLEMENTATION ISSUES

MARPOL ANNEX VI

Regulation 12 – Ozone-depleting substances

Regulation 12 read as follows:

"Ozone-depleting substances

(1) Subject to the provisions of regulation 3, any deliberate emissions of ozone-depleting substances shall be prohibited. Deliberate emissions include emissions occurring in the course of maintaining, servicing, repairing or disposing of systems or equipment, except that deliberate emissions do not include minimal releases associated with the recapture or recycling of an ozone-depleting substance. Emissions arising from leaks of an ozone-depleting substance, whether or not the leaks are deliberate, may be regulated by Parties to the Protocol of 1997.

(2) New installations which contain ozone-depleting substances shall be prohibited on all ships, except that new installations containing hydrochlorofluorocarbons (HCFCs) are permitted until 1 January 2020.

(3) The substances referred to in this regulation, and equipment containing such substances, shall be delivered to appropriate reception facilities when removed from ships."

Interpretation:

With respect to the completion of the IAPP certificate supplement items 2.1.2 and 2.1.3, permanently sealed refrigeration equipment should not be included. Permanently sealed refrigeration equipment are equipment where there is no refrigerant charging connections or potentially removable components.

Regulation 14 – Sulphur Oxides (SOx)

Regulation 14(1) reads as follows:

The sulphur content of any fuel oil used on board ships shall not exceed 4.5 % m/m.

Regulation 14(4) (a) reads as follows:

The sulphur content of fuel oil used on board ships in a SOx emission control area does not exceed 1.5 % m/m.

Interpretation:

The 4.5% limit should be applied to all ships starting from the 19 May 2005 even if the IAPP certificate was not already issued for the ships concerned. The same applies for the 1.5 % limit starting from 19 May 2006 for the Baltic Sea SOx emission control area and the corresponding entry into effect dates for other designated SOx emission control areas.

Regulation 16 – Shipboard incinerators

Regulation 16(9) reads as follows:

Monitoring of combustion flue gas outlet temperature shall be required at all times and waste shall not be fed into a continuous-feed shipboard incinerator when the temperature is below the minimum allowed temperature of 850°C. For batch-loaded shipboard incinerators, the unit shall be designed so that the temperature in the combustion chamber shall reach 600°C within five minutes after start-up.

Interpretation:

The minimum stabilised combustion chamber flue gas outlet temperature of 850°C is equally applicable to continuous-feed and batch-loaded shipboard incinerators. Monitoring of the combustion flue gas outlet temperature shall be required at all times for both types of incinerators.

Regulation 18 – Fuel oil quality

Regulation 18(3) reads as follows:

For each ship subject to regulations 5 and 6 of this Annex, details of fuel oil for combustion purposes delivered to and used on board shall be recorded by means of a bunker delivery note which shall contain at least the information specified in appendix V to this Annex.

Interpretation:

Bunker delivery notes, for fuel oil delivered to and for use onboard on or after the 19 May 2005, should be kept on board even if the IAPP certificate has not been issued yet.

THE NOx TECHNICAL CODE

Chapter 3.2 – Test cycles and weighting factors to be applied

Chapter 3.2.3 reads as follows:

For variable-pitch propeller sets, test cycle E2 shall be applied in accordance with table 1.

Table 1 – Test cycle for "Constant-speed main propulsion" application (including diesel-electric drive and variable-pitch propeller installations)

Test cycle type E2	Speed	100%	100%	100%	100%
	Power	100%	75%	50%	25%
	Weighting factor	0.2	0.5	0.15	0.15

Interpretation:

For application of the term "variable-pitch propeller sets" it shall be interpreted that the E2 cycle is applicable to any propulsion engine coupled to a variable pitch propeller, irrespective of whether the system operates at constant speed or variable speeds.

Chapter 5.9.6 – Test sequence

Chapter 5.9.6.2 reads as follows:

During each mode of the test cycle after the initial transition period, the specified speed shall be held within ± 1% of rated speed or 3 min-1, whichever is greater, except for low idle, which shall be within the tolerances declared by the manufacturer. The specific torque shall be held so that the average, over the period during which the measurements are to be taken, is within 2% of the maximum torque at the test speed.

Interpretation:

For application of the term "within 2% of the maximum torque" it shall be interpreted that in order to be consistent between the constant (D2 and E2) and the variable speed (C1 and E3) test cycles the specific torque at each load shall be held within 2% of the maximum (rated) torque at the engine's rated speed.

Chapter 5.9.9 – Re-checking the analysers

Chapter 5.9.9 reads as follows:

After the emission test, the calibration of the analysers shall be re-checked, using a zero gas and the same span gas as used prior to the measurements. The test shall be considered acceptable if the difference between the two calibration results is less than 2%.

Interpretation:

For application of this section the following interpretations shall be applied:

(a) The term "the calibration of the analysers shall be re-checked," shall be interpreted as the zero and span response of the analysers shall be re-checked'.

(b) The term "if the difference between the two calibration results is less than 2%" shall be interpreted as 'if the difference between the two check results is less than 2%' where the 2% is understood to be 2% of the span gas concentration (and not analyser full scale), i.e.: Maximum permitted difference in span or zero check readings (ppm or % as appropriate):

= 0.02. Initial span gas concentration reading.

Chapter 5.10 – Test report

Chapter 5.10.1 reads as follows:

For every engine tested for pre-certification or for initial certification on board without pre-certification, the engine manufacturer shall prepare a test report which shall contain, as a minimum, the data as set out in appendix 5 of this Code. The original of the test report shall be maintained on file with the engine manufacturer and a certified true copy shall be maintained on file by the Administration.

Interpretation:

For application of this section the term "as a minimum" shall be interpreted as incorporating the necessary data to fully define the engine performance and enable calculation of the gaseous emissions, in accordance with 5.12, from the raw data units to the cycle weighed NOx emission value in g/kWh. The data set given under Appendix 5 should not be considered definitive and any other test data (i.e. engine performance or setting data, description of control devices, etc.) relevant to the approval of a specific engine design and/or on-board NOx verification procedures must also be given.

With reference to appendix 5 of the Code it shall be further interpreted that:

The term "Deviation" as given under "Sheet 3/5, Measurement equipment, Calibration" refers to the deviation of the analyser calibration and not the deviation of the span gas concentration.

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ANNEX 14

TERMS OF REFERENCE OF THE SUB-COMMITTEE

1 Under the direct instructions of the Maritime Safety Committee and the Marine Environment Protection Committee, the Sub-Committee on Bulk Liquids and Gases (BLG) will consider matters related to the following subjects, including the development of any necessary amendments to relevant conventions and other mandatory and non-mandatory instruments, as well as the preparation of new mandatory and non-mandatory instruments, guidelines and recommendations, for consideration by the Committees, as appropriate, including the role of such measures for the protection of the marine environment:

.1 prevention and control of marine pollution from ships and other related maritime operations involved in the transport and handling of oil and dangerous and noxious liquids substances in bulk;

.2 evaluation of hazards of dangerous and noxious liquid substances in bulk transported by ships;

.3 control and management of ships' ballast water and sediments;

.4 construction, equipment and operational requirements for ships carrying bulk liquids and gases;

.5 protection of personnel involved in the transport of bulk liquids and gases; and

.6 survey and certification of ships constructed to carry bulk liquids and gases.

2 The conventions and other mandatory instruments referred to above include, as a minimum:

.1 1974 SOLAS Convention (chapter VII, parts B and C) and the 1988 Protocol relating thereto;

.2 MARPOL 73/78 (Annexes I, II, IV and VI, as appropriate);

.3 International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004;

.4 International Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk (IGC Code);

.5 International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code); and

.6 Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (BCH Code).

3 The non-mandatory instruments, which the Sub-Committee may be called upon to review, include, as a minimum:

.1 Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (GC Code); and

.2 any recommendations and guidelines relevant to the carriage of bulk liquids and gases.

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ANNEX 15

PROPOSED REVISED WORK PROGRAMME OF THE SUB-COMMITTEE AND PROVISIONAL AGENDA FOR BLG 11

		Target completion date/number of sessions needed for completion	Reference
1	**Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments**	Continuous	~~BLG 9/17, section 3~~ BLG 10/19, section 3
2	**Casualty analysis** (co-ordinated by FSI)	Continuous	MSC 70/23, paragraphs 9.17 and 20.4; ~~BLG 8/18, section 13;~~ MSC 80/24, paragraph 21.6 BLG 10/19, section 10
3	**Consideration of IACS unified interpretations**	Continuous	MSC 78/26, paragraph 22.12; ~~BLG 9/17, section 6~~ BLG 10/19, section 9
H.1	Environmental and safety aspects of alternative tanker designs under MARPOL 73/78, regulation I/13F		BLG 3/18, paragraph 15.7
	.1 assessment of alternative tanker designs, if any (as necessary)	Continuous	BLG 1/20, section 16; BLG 4/18, paragraph 15.3
~~H.2~~	~~**Requirements for protection of personnel involved in the transport of cargoes containing toxic substances in all types of tankers**~~	~~2006~~	~~BLG 1/20, section 12; BLG 9/17, section 4~~

Notes: 1 "H" means a high priority item and "L" means a low priority item. However, within the high and low priority groups, items have not been listed in any order of priority.
2 Struck-out text indicates proposed deletions and shaded text shows proposed additions or changes.
3 Items printed in bold letters have been selected for the provisional agenda for BLG 11.

~~H.3~~ H.2	**Oil tagging systems**	~~2 sessions~~ 2008	MEPC 45/20, paragraph 17.4; BLG 8/18, section 10 and paragraph 15.4.3
~~H.4~~	~~**Amendments to resolution MEPC.2(VI)**~~	~~2006~~	~~MEPC 51/22, paragraph 17.12; BLG 9/17, section 7~~
~~H.5~~	~~**Development of standards regarding rate of discharge for sewage**~~	~~2006~~	~~MEPC 51/22, paragraph 17.15; BLG 9/17, section 8~~
~~H.6~~ H.3	**Development of provisions for gas-fuelled ships** (co-ordinated by DE)	2007	MSC 78/26, paragraph 24.11; ~~BLG 9/17, section 9~~ BLG 10/19, section 6
~~H.7~~ H.4	**Development of guidelines for uniform implementation of the 2004 BWM Convention**	~~2006~~ 2007	MEPC 52/24, paragraph 2.21.6; ~~BLG 9/17, section 11~~ BLG 10/19, section 4
~~H.8~~ H.5	**Guidelines on other technological methods verifiable or enforceable to limit SOx emissions**	2007	MEPC 53/24, paragraph 4.40
~~H.9~~ H.6	**Amendments to MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea**	2007	MEPC 53/24, paragraph 20.6; BLG 10/19, section 15
~~H.10~~ H.7	**Review of MARPOL Annex VI and the NOx Technical Code**	2007	MEPC 53/24, paragraph 4.50; BLG 10/19, section 14

Proposed provisional agenda for BLG 11*

Opening of the session

1 Adoption of the agenda

2 Decisions of other IMO bodies

3 Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments

4 Development of guidelines for uniform implementation of the 2004 BWM Convention

5 Review of MARPOL Annex VI and the NOx Technical Code

6 Development of provisions for gas-fuelled ships

7 Amendments to MARPOL Annex I for the prevention of marine pollution during oil transfer operations between ships at sea

8 Oil tagging systems

9 Guidelines on other technological methods verifiable or enforceable to limit SOx emissions

10 Casualty analysis

11 Consideration of IACS unified interpretations

12 Work programme and agenda for BLG 12

13 Election of Chairman and Vice-Chairman for 2008

14 Any other business

15 Report to the Committees

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* Agenda item numbers do not necessarily indicate priority.